

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 93/01294

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see PCT/ISA/206 mailed on 12.08.93

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11, 15-23(part.)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 93/01294

I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all)⁶

According to International Patent Classification (IPC) or to both National Classification and IPC

Int.C1.5 C 12 N 15/11 C 12 Q 1/68

II. FIELDS SEARCHED

Minimum Documentation Searched⁷

Classification System

Classification Symbols

Int.C1.5

C 07 K

C 12 N

C 12 Q

Documentation Searched other than Minimum Documentation
to the extent that such Documents are included in the Fields Searched⁸

III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹

Category ¹⁰	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
X	SCIENCE vol. 252, 21 June 1991, WASHINGTON, DC, USA pages 1651 - 1656 M.D. ADAMS ET AL. 'Complementary DNA Sequencing: Expressed Sequence Tags and Human genome Projects' see the whole document ---	1-11,15 -23
P,X	NATURE vol. 355, 13 February 1992, LONDON, UNITED KINGDOM pages 632 - 634 M.D. ADAMS 'Sequence Identification of 2375 human brain genes' -----	1-11,15 -23

¹⁰ Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "A" document member of the same patent family

IV. CERTIFICATION

Date of the Actual Completion of the International Search

07-07-1993

Date of Mailing of this International Search Report

22. 10. 93

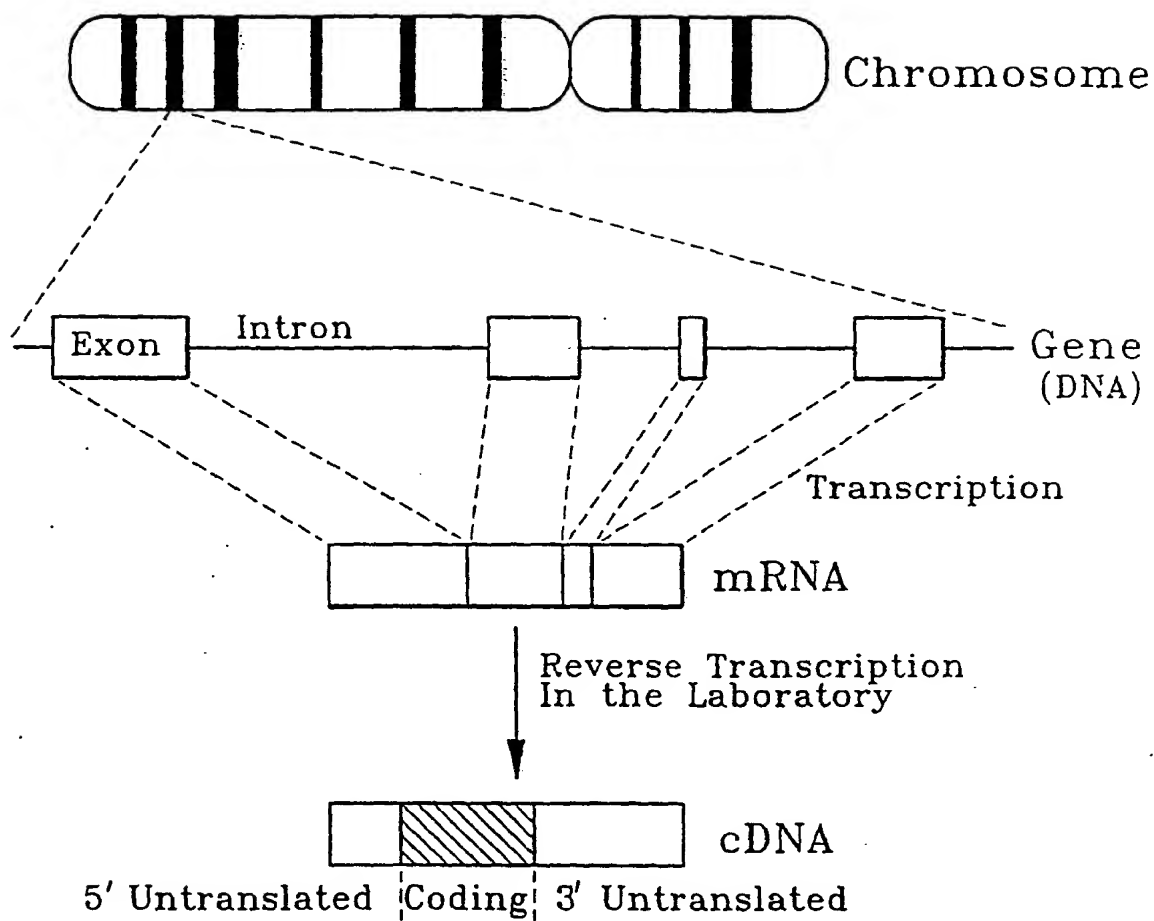
International Searching Authority

EUROPEAN PATENT OFFICE

Signature of Authorized Officer

VAN PUTTEN A.J.

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**FIG. 1****SUBSTITUTE SHEET**

21. A panel of at least 100 isolated polynucleotides having the sequences of Claim 3 or Claim 16.

22. An antisense oligonucleotide capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10.

23. A triple helix probe capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10 having at least a 10-base homopurine or homopyrimidine sequence, said probe comprising single-stranded DNA having at least a 10-base homopurine or homopyrimidine sequence and being adapted to bind to the major groove of double stranded DNA which includes said polynucleotide-encoding sequence.

25. The polynucleotide of Claim 1, wherein said SEQ ID NO is 913.

26. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1039.

27. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1395.

28. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1567.

29. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1667.

30. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1704.

31. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2089.

32. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2297.

33. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2302.

8. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a structural functional grouping and is one of SEQ ID NOS: 316-2421.

5 9. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 11 in a developmental control grouping and is one of SEQ ID NOS: 316-2421.

10. An isolated polynucleotide coding for a human protein or polypeptide, which includes a coding region corresponding to the EST identified as:

10 SEQ ID NO: 316 - 2421;
or a polynucleotide complementary thereto.

11. The polynucleotide of Claim 10, wherein the SEQ ID NO is 316-1000.

12. The polynucleotide of Claim 10, wherein the SEQ ID NO
15 is 1001-1500.

13. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1501-2000.

14. The polynucleotide of Claim 10, wherein the SEQ ID NO is 2001-2421.

20 15. The polynucleotide of Claim 10, wherein said polynucleotide further includes the entire sequence designated as any one of SEQ ID NOS: 316-2421.

16. An isolated polynucleotide comprising at least 150 bp of a sequence of Claim 10 and wherein said SEQ ID NO excludes NOS
25 485, 650, 1834, 2073, 2092, and 2353.

17. An isolated polynucleotide sequence, which hybridizes to a sequence designated as any one of SEQ ID NOS 316-2421, except SEQ ID NOS 485, 650, 1834, 2073, 2092, and 2353, or to a sequence complementary thereto, under hybridization conditions
30 sufficiently stringent to require at least 97% base pairing.

18. A polynucleotide according to any one of Claims 4-17, in substantially purified form.

19. A construct in isolated form comprising a vector and a polynucleotide according to any one of Claims 1-17.

35 20. The construct according to Claim 19, further comprising a promoter operably linked to said polynucleotide.

5 WHAT IS CLAIMED IS:

1. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS 650, 1834, and 2073;

10 or having a sequence complementary thereto.

2. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

15 or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

3. An isolated polynucleotide that includes a sequence designated as one of:

20 SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

25 4. An isolated polynucleotide operably coding for a native human polypeptide or protein, which includes a region coding for the same amino acid sequence as a native human coding region corresponding to a sequence designated as one of:

SEQ ID NO: 316 - 2421.

30 5. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 6 and is one of SEQ ID NOS: 316-2421.

6. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 7 and is one of SEQ ID NOS: 316-2421.

35 7. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a metabolic functional grouping and is one of SEQ ID NOS: 316-2421.

495

GCTTTCTTCC TACCCCATTC CCGGCTTCCC TCCTCTCTCC CTGCAGCCTG GTTAGGTGGA TACCTGCCCT GACGTGTGAG
GCAAGNTAAG GCCTGGAGGG TCAGATGGGG AGACCAGGTC CCAAGGGAGC AAGACCTGCG GANGCARGCA AGCCCCNGCC
CTTCCCCCGT TTTGAACATG TGTAAACGAC AGTCTGCCTG GGOCACAGCC CTCTCACCCCT GGTACTGCGAT GGACGNTAATG
CTAGCTGCCC CTTTCCCGIN CTGGGCACCC CGAGTNTCCC CGACCCCCGG GTCCCAGGTA TGCTCCACC TCCACCTGCC
CCACTCACCA CCTCTGNTAG TNCAGACAC CTNCAOGYCC ACCTGGTCCT CTNCCATGCG CCACAAAAGG GGGGGCACGA
GGGACGAGCT TAGCTGAGCT GGGAGGAGCA GGGTGAGGGT GGGOGACCCA GGATTCCCCC TCCCCCTCCC AAATAAAGAT
GAGGGTACTA AAGTGTGCTT GGTTTTATT TTATTATTAT TTTTTCCTT TTCCAGTATA CTAGCTGTGTC TTTTAAGAAA
GGGGATATTA AAAAAAAAAA AAAGACAAA GIGTTTTTAA AAAAAAGCAA CACCCACACC TGGTGTCTGT ATATAGTCAG
CTTATCTCGT GTTCAATCGT CTGATCTCTA CAGAGAGAAG TGGAAAATGC TGTATCAAGG GTGGGCTTAG CTGTGCCTTT
CCAATAAAGA TG

494

GCTGTACTAT ATGAAGCCTG CATATACTGT GAGCTGTGAT TGGGGAACAC CAATGCAGAG GTAACCTCTCA GGCAGCTAAG
 CAGCACCTCA AGAAAACATG TTAAATTAAT GCTTCINTTC TTACAGTAGT TCAAATACAA AACTGAAATG AAATCCCATT
 GGATTGTA CTCTNINCTGA AAAGTGTGCT TTTTGACCT ACTGGACATT TATTGACTTA ATTGCTTCTG TTTATTAAAA
 TTGACCTGCA AAGTTAAAAA AAAATTAAAG TTGAGAACAG GTATAAGTGC AACTGAATA GTCTAATCTA CATGTAACAC
 ATATTINNGT ATGATTTTCT ATACTCTAAT CAGCACT

SEQ ID NO:2420: (Length of Sequence = 1843 Nucleotides)

GAAGCTCCGG CCCAGGTGGC CGCTGGCTGC TGAGCTCAG CCAAGGTGCG GCTGTGGTGG TGGTGGTGGC GGCTGCAGGC
 TTTGCTGCTG CTGGATGTTT GCTGGCTGCA GGTTCGTCTG CTGCATCTGT AAGTTTGTG GCTGCACCTG CTGGGTCTGC
 ACCAGGTGAG GCTGGGTGGC CAGCCGGGTG CTGGGCAGGC CCTGGTAGCT CATCATCTGG GACAGGGCGC TGGCAGCAAG
 GCTACTGTGC AGCGGGCCTA CCATGCCATG CTGCAGGGAG GGGGCCCTGTG TGCTCAGGGG GCCTGGTGCC AACTCCCCC
 GCAGAGGGTT GTATTGGTTC GGCACCATGC CGCTCTGCAG CCGGGACAGC CACTCGCATT GACCATTCAA ACTGGTGGAC
 CCGNCCACAG TGAAATTCAG GGCCTCTCCG CTGCTNGAGC CCAGGACGGT GCTGGTGCCA GAGGCCACAG GCAGGTGGGA
 GAGACGAGGT GGGCCAGTNT TAAAGGCCAG CCGGCCGCC CCACCCANCG CCGCATYTC GGGCTTGGCC GCCACGTTCA
 GGTNCCCNAT GCCCAGGTGG GTGTGGGCA TYCCAGGCAG GTGGTTGAGG GGCACGGACG GAGACTGCTG GAACGGGGAG
 GGCAGNAGTG GCGGCGAGGC CACGCTGAC AGGTAGCCAT GGGGTGACTC CAGGGAGTCC ACGGGCGAGA GCATGCCGGA
 GCTGTCCAGC AGGCAGNCCT TGCGTCTCTG GGACTTCTTC CTCGCTGCTT TGAGGTCTCT GGCTCTCTTG CTTCACAGG
 CCAGGCCCTT GCTGCTGGGC TTGCGGACCT TCTTGCCCTG CACGCCGGGC TTGAGGCTGC CCAGGTAGCC GTTGGGCGAG
 CAGAGCGNGG GCGACAGGGT GGGCGTGCCC CCGAGCGGGC TCCGTGCAGC TGCGGGCTGC GCACCAGGTT GTACTCGTCC
 AGCAGCCTCA CGATGTCTG ATGCATGCNC TCCNTGCGA TGTGCGCGCG CAGGCGGTCC ATATGATCCG TGATGTCCCG
 GTTGGCAAAG TGGTCCAGCA GCACCTTGGC GGTCTCGTAG CTGCCCTCCC GGGCGGCCAG AAACAGGGGT GTCTCTCTCC
 TGTGTCTCTG CATATCTTTG TTAGCCCCGT TCTTCAGGAG CACAACGCG GCATCCACAT TGTTCACNGC GCGCGCCCAG
 TGCAGGGCGG ACTTGCCAG GTNATCTACG GCGTTCAGT CCGCGTGTGA GTTGATGAGG TCCTCCAGCA TGCCCTCCAC
 GGCCAGGCGG GCAGCCAGGN TCAGTGGCGT CGTGCCATCA TGCATGCGGG CATCCAGGTC TGTGGCTCGG TTCGGATCA
 GGATCTTGGA AGACACCTTG TGCGTCCGCA GACACAGCG CATGCAGCG GGTGCGGCC ATGTGTCTCT GGATGTTGGC
 ATCTGCGCTG GCCTCCAGCA GCGGCTTGGC GGCATCAGAG CGTGAGTAGC GGGCGGCCAG GTGCAAGCG GTCTCGCCCG
 TNCGGTCTGT CTGGTTGTGC AAGCTGGCGC OCTGGTAGAT GAAGTCGGAG ATGACGGCG GCGGCTCTC CTCTCTCTCG
 CTGTGCCCCG TCTCCAGGCC GCGCCCGCTG CAGGAGGCGA TCATGAGCGG GGTGAAGCCA TCAGGCCCGC GGACATTGAC
 GTCCATGCAG TCGGCGTCAA CCTCACCTG GGGCGGTGTG GGGGCCATGG CANACATCG CAGGTACCG GCATCCAGGT
 GCTGCTGAGT CCACTGCCCG TGGTCTGTCT GGTCTGTCAG GTCAGGCAGA ACCACGGGCT CCTCGAACC GAACTTCTTG
 GTC

SEQ ID NO:2421: (Length of Sequence = 1452 Nucleotides)

CCAGCAACTC AAATTCACCA CCTGGGACTC CTGCGACCGC ATCAAAGACG AATTTTCAGT ACTGCAAGNT CAGTACCACA
 GCCTCAAGCT CGANITGTAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CGTCACTATG TGATGTACTA CGAGATGTCC
 TACGGCTTGA ACATCGAGAT GCACAAACAG GCTGAGATCG TCAAAGGCT GAACGGGATT TGTGCCCAGG TCCTGCCCTA
 CCTNTCCCAA GAGCACCAGC AGCAGGTCTT GGGAGCCATT GAGAGGGCCA AGCAGGTAC CGCTCCCGAG CTGAACCTA
 TCATCCGACA GCAGCTCCAA GCCCACCAGC TGTCCAGCT GCAGGCCCTG GCCTGCCCCT TGACCCCACT ACCCGTGGGG
 CTGCAGCCGC CTTCGCTGCC GGGGTCAGC GCAGGCACCG GNTCTCTCTC GCTGTCCGCG CTGGGTTCC CAGGCCACCC
 TCTCCAAGGA AGACAAGAAC GGGCACGATG GTGACACCCA CCAGGAGGAT GATGGCGAGA AGTCGGATTA GCAGGGGGCC
 GGGACCGGGA GGTGGGAGG GGGACAGAG GGGAGACAGA GGCACGGAGA GAAAGGAATG TTAGCACAA GACACAGCGG
 ANTCTGGGAT TGGCTAAACT CCCATAGTAT TTATNGTGGC CGCCGGCGGG GGCCCCAGCC CAGCTTGCAG GCCACCTCTA

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ATGTAATACA GTGTAGAAAG CGATCATGTC ATAAGCAATG ATTCTGTACA ATCATNCNGC AGAAAATTAG TTTTGGAGAA
 TTCTTGGTAA TTGAAGACCA GCAGAGCACC CCTCCCCACC CGCCCCCTAA AAGTGCTTAC AATTTACAGG GATYCTTTTC
 TTTTTCAAAG ACCCAAAGAY ACGTGGTCAG AAAAMAAAAG CTTGAAGTCT CAATGCCTAA TGTCGTGCAC ATTKNACAGG
 GACGC

SEQ ID NO:2417: (Length of Sequence = 384 Nucleotides)

GGTTTTGCAA GATGATGGAA CATOCCATAA GCCCAGGTGT GCAGCTAACC TTTAGAAGCT GGAAAAGGCA AGGAAACATA
 TTCTGTAGAG CCTCCAGAAG GAACACACGT CTGCACACAC TTTGTTTTTA GCTCAGTGAA ACTGATTTTG GACTACTGAC
 CTTCAGAACT GTAAGATAAA TTCTGTGTGT TTACGTTTG TGGTGTATA GAAGTACAG AAATGAATAT ACTTACCGTA
 GTTTAGAGAG AGATGGGAGG ATACTTTTTT TTCTOCCFTC TTTTGAAGG GAGGTAGGTC TCCTTAACTC CAGAGGAAAG
 ACTTGICTTT CTTCATATAG GGGCCCTTTG ATTCTTAATT CATGGGAGTT GTTTAGGAGA TTGA

SEQ ID NO:2418: (Length of Sequence = 1645 Nucleotides)

GTGATGGCTG CTTGAGGGG GACCATCATG TOGGAGACCG CATTTGGTGA GGTCTCACC CACAGCCCAT GCCAGCCTC
 CTGCAGACTC AGGTCATCCA GCTGGTOGAT GGCTCTTTGC ATACCTGGTG CCTCTCCTC TGGGCTTGG CAGGCTTCTC
 TGGGGGCTTC TCAGATGACT CTTTGGCCTT CTCTCTGTC TTGGCTAACT CCTTGGCCAG CTCTGAACGT GCCTCCTTGG
 CTCCCTCTTC TACCACCTCC TCCGTTTGG CCAACTTGCT CACGGCGTC TTGGTAGTGG CTTTGGAGGT CTCTTGCTA
 TCAGCCCGCT GTTTGATTTT GCTGGGCTTG AGGTTGGTAG GCACAGCCCC AGAAGCCAGG NCTTCTGCG TGGCCACAGG
 GTAACGCAGG AAGTCCAGAT GCGAAGCTT TTCTAGGCC TCCAAGATCT TGTTTTGGGG AGCATTTCCT GGAAAAGCA
 CACGCACAAT CTCTCAGTG GGATTGGCTG GTAGCCAGAC CACCAGAGCA GTGATAGAGG TAAGGTAGGG CACGGAGATC
 TCAGCCTCCT TCCCATGGG CAGCACGATG CCTGINTTG CTTTACTATT GCTGCCCCAC TTTTGCATGA GGAAGTGCAT
 CTCTTGCTG TCCTTGACAG GGTGAGGAC ATACATGTCC AGCCGGCCCA CACCCATTTT GTTGAAGAGG GTCAGTGGCT
 CAATGGTATT GCTGACCACA CGATATAGAG GCTCAGCCTG GATGCCCAGG CGTTTAAAGT GCTGCAGAGT GAGGCAGGCC
 TCCTCAATGC TACGCTTGGC TTTCGGGGAG GCATCAGGAA GCCGCAGCTT CTCAGGCACG TTGAAAAGA CAACTCCAAG
 CTCAGGANAG ATAAGGTTCT TCACCCAGTC GCTGTAACTG CTAGAGCCT GGNACTGCTC CTCTCTAGC TCTGCCACTT
 TGGCTGCAG TAGTCCATTG ATGCCTGGCA GGTGTCTGCT CCCAATGTGT GTNAGTAGCA CCGAGTCAAT GCGGTCCAAG
 TNCCGTACCA GCTTCCAAA ACAGGACTTG CGATCAGAGC CACCATCCAC CAGGATGTTG AAACCATTGA CAGCAAAGAG
 GGCAGAGTCC CCAAGACCAC CTGGGAAGAT GTAGCAACAA GGCTTGGAGA GCTTGAGGAA GCCCCCTGAG GTGGGGGGCT
 CTAGTAGGTC AAATGGGGAT GGCACGTCCA CAGTCTCAGA GACATACTCG GAGAACTCAG CCACGCCGTC CATGGTGGGC
 AGAGTGGGCT CAGGGTTTAG CCGGAGGTGC AGGGTCTCTT GGGAACTGGA TAATCCCAGG TGGCTCCAAT CACCTTCCCC
 TAAGCAGGAC ACGGTAAGGA AGGCCTGTAT CCCAGGGTCT CTATTGCTGA GCAATTGGGA AATCTGGGG TTGTGAAGGA
 CCTGGGCAA GTTTTCATAT GAGTAGGTGC CACTCTGTAG GATGAGGTCT CCCCAGGCT CTAAACTTTG CCCACTCAAG
 ATTAGTAGTT TATAAGCTGA TGAGCTGCTA AGAAGATGAT GAACCTCAGA GCTGATGCTG TCTGCACTGG GATTTACCAG
 GATGATGGTC TCTAGGATCT CACTCTGGTG GCAAAGGGTC CTCTG

SEQ ID NO:2419: (Length of Sequence = 837 Nucleotides)

GGAAGGATGA GAAACAGATT TNGCTCACT TCATGGGCTG GCCTGGAATT GACGATGGTG CAAACCCAAA TNATCCTGAT
 GTAATTNATG AAGATTATGG AACTGCAGCG AATGACATCG GGGACACCAC GAACAGAAGT AATGAAATCC CTTCCACAGA
 CGTCACTGAT AAAACCGGTC GGAACATCT CTCGGTCTAT GCTGTGGTGG TGATTGCNTC TGTGGTGGGA TTTTCCCTTT
 TGGTAATGCT GTTTCINCTT AAGTTGGCAA GACACTCCAA GTTTGSCATG AAAGGTTTTG TTTTGTTC TAAGATCCCA
 CTGGATGGGT AGCTGAAATA AAGGAAAAGA CAGAGAAAGG GGCTGTGGTG CTTGTGGTT GATGCTGCCA TGTAAGCTGG
 ACTCCTGGGA CTGCTGTGG CTTATCCCG GAAGTGCTGC TTATCTGGG TTINCTGGTA GATGTGGGCG GTGTTTGGAG

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CCCCAGTTTT TCCTGCAGAT CGGGAGTCGA GCAATGCCTA CCCCCGCTC CGCACCAGT TGGGCGCTCC CGGATGATGC
CCTACCCCTT T

SEQ ID NO:2410: (Length of Sequence = 135 Nucleotides)

CTGCAGGACT TGCGAAGASC GTGCATTCCC AGTGGGCGAA CGGGAATTCC AACGGAGAGA GGGTTATCTT GTGGGGGGCT
ACCCGTGGAG AGCAAGGCGC CCCAGGGGT TGGNTCGGTG AAATTNAGGT CGCCC

SEQ ID NO:2411: (Length of Sequence = 330 Nucleotides)

ATGCTGCTCG GTTCTCTGT CCCCCCACT TTACCGCGAA GCCCCAGCT CAGAGTCCCC TCGTTTCTCC TTGGAGGCGC
TGACGGGTCC AGATAAGGAG CTGTGGCTTA TTCAGGCCCC TGCAGACTTT GCCCCAGAAT GCTTCAATGG GCGGCATGTG
CCTCTNTCTG GCTCCCAGAT CGTCAAGGCG AAATTGGCAG GCAAGCGCA CGCTATCGG AGTCTCAGC AGCTGTCCCC
AAGCTGGAGA AGCGACCCTG CTGGCCCCCT CAANGGAGGC AGGAGGTGGA CTCACCTGTG CTCAGCCCC CCAGGGCACC
CTAAGGATCC

SEQ ID NO:2412: (Length of Sequence = 583 Nucleotides)

TGCACCGGTG CACCAGGTGC CGTGTGGAT TGTNACAGNN ACGTGGGTNA TGAAGGTAAC CACCTACCGN GTGCACGTGG
CCNAGCAGCA GGACGTGCAC CTGACTGTNA CGGAGTCTCG GCAGCATGAG CTCTCGCCAG ACTCGAAGCTT GCCCCGTGAG
CTCTCACCA TCCGTGTGGC CAGCACCAAC CCTGCTGTGC AGGCCCTTGA CATCTGGCTG AACTCCACTG AGTACGGGGA
GCTCTGCGAG AAGCTCCGGG CACCCATCCG CAGGGCAGCC CATGTGGTCA TCCACCAGAG CCTGGGCGAC CTNTTNTTGG
AGACATTTGC CTCCCTGGTA GAGGTCAACC CGGCCTACTC AGTGCCAGC AGCCAGGAGC TGGAGGCGCTG CATAGGCTTG
CATGCAGACA CGTGCCAAG TGAAGNTGGT GAAGACCTGC CAGGAGTCAG CCACAGGGGA GTTCCAGCAG TTTAATTC
CGCCCCATGT TGGTGGCTTA ACTTGATNGG GAAAGTGGNT TNGNCAAGCG GCAAGACCCC CTGGGNCCTT NAAACTTGT
TGGCAAACGG GGTNCTGCA TGG

SEQ ID NO:2413: (Length of Sequence = 203 Nucleotides)

TGTCCTCCC ACCCCCTAGC CATGCAGNGG TGAATNGGGG AACCCAGGNN GGGGGCTGAG AAGCTCCAGG CCACCTTNAG
GGAATCCACG AGGGTCTTTC TACCAGGAAG AAGTGCCGCA GCTGCGTGGC CGCCGAGACC ACGCGGGAGG TGATCTGGTG
GGACAAACGT TCCGTCTGCT CCCGAGTCAG GAGATCGAGT CTC

SEQ ID NO:2414: (Length of Sequence = 92 Nucleotides)

AAGGGGCAGG ATGGGGCTGG GAAGTCCAAC CCCACGCATT TGGGCTCAGC CTGGACATG GAGGCTGAC AGCTGTTGTC
CTTTGGGGAT CC

SEQ ID NO:2415: (Length of Sequence = 401 Nucleotides)

CTTTTCCCTT CTGTGNCCTA AATGCANCAT CTTNATACAC GTTGCTTAAC CTAGAANCCT GGCTCCACCG TGAATTCTAA
TTGGTCCGTG CTATCGAGGC ACTGTCCCT TAACTGGTCT CGTCCAGTG GCCCNACTG CTTTCTCTCC TCTTCCAGNA
ATGGCTCTTC GGGCCAGAG TTCGAATCTC GCGATCGGGA TGGGACGGA GTACCGGCT GGGGTGTCCC AGAGCCCGGA
CTGAGCTGGG GAGTCAAGAC CTCGGGCGAT GAGGGCTGAG CAAGTCGGAG TCGTAGGTCC AGTTCTTCCC CAGCTTCTCC
TGTCTCCAAT CTGTGGGT CTGGGGTTC TCGTCTTCC AGCGGGGTGG AGCTGCTGGT GGAAGAGTCC TCCCCGATC
C

SEQ ID NO:2416: (Length of Sequence = 245 Nucleotides)

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TCATTAAGTT ATACTCTTGG ATAGGAACAC TGAGGAAAAA TGAAAGATGA GATTTGCAAT AGGGATTCTC TAATTCATCAT
GTTAATCTGT TTTGTACCAT TTTACTTTG TCTTTGTGG ATCTCTCTT TTTATTAGAT GATATTAAAG GGGATTAAAG
TTGTATTGTA TGAAATGTC

SEQ ID NO:2404: (Length of Sequence = 399 Nucleotides)

TTCCCAAAGT GGTGTGAACA TTTTACTCTC CTACTAACAG TGCATGGGAA GCCAGTTTCT CTATATCCTC TCCAACATTT
GGTGCTGTCA ATCTTTTAAA ATTTTAGCCA TTTTGTGGT TGTATAGTGT TATCTCATTG CAGTTTAAAT TTGCOGATCC
CTGAATGTGT GTAGGTGTGT ATATGTATTA TATAATATAT ATATNATNCT TTCACTTATT TTGAAGTAAT TTCAAAGTTT
CCAGAATAAT ATCAAGAACT CCTGTACTCC CTTGCGCAGA TTCTCCAATT GTAATGTTTT ATGTCATATG CTCCATTGCC
CACTCTCCTC TCTACTTATA GCTTGCATTA GTGTTTTCTT GGAACCNITA GAGATGAAGG TGGAAAAAAG GATGCGGGT

SEQ ID NO:2405: (Length of Sequence = 404 Nucleotides)

GGAACAGAGT GACCTGACCA CCTAACATC AGCTGCATAC CAGCAGAGCC TGACTGTGTA CACAGGAACT CATCTCCTCA
GCATGCAGGG GAGCCCTGGA GGACACAATC GCGCAGGCAC CCTCATGGCA GCTGACAGAG CCAAACAAAT GTTTGGACCC
CAAGTGCTTA CGACCGGCA CTACGTGGGC TCAGCAGCTG CTTTTGCAGG GACACCAGAG CATGGACAAT TCCAAGGCAG
TCCTGGTGGT GCCATGCGGA CTGCTCAGCC CCCAOCCTCAC TATGGGCCCA CACAGCCAGC TTATAGTCCT AGTCAGCAGC
TCAGAGCTCC TTGGCATTTC CCGCAGTGC AGTTACCTAT CTTAGCCAC AGCCACAGGC CTATTGCTGT GCATGGGCCA
TTTT

SEQ ID NO:2406: (Length of Sequence = 280 Nucleotides)

AAGAGAGAAC ATTTTATTTG TCTATAATTA GGGTAAACAG TTGGGTAAAA YCTTACTAAA AGAAAGTTAA GGTGTGCTTA
ACACAAGATA TATAATGCA TAAATYAGTT AATTAAATTT YAATTAAAM CAGCTGCTTT GGAAATCCAA CATGTATACT
TCAAAATAAT TTACCTAAAT AACTTATGAA AATGGATGTT ATTGTACAAC TCATCTCTCC TTATAAAAGG NGAACAAAGG
ACATAGGAAA GCTGAAAAGA AGGCTAGATG AAGATACAGG

SEQ ID NO:2407: (Length of Sequence = 350 Nucleotides)

TCCAAGGGCA ATATAAATTA CAGTATGCAA AACATACTGA CTGGCTGAGG TAAAACGCAC TGCTCCTGCC TCACGTCACC
ATGAGGGGAA ACACACATAT GCTTTTAAAA ACATCTGGCT TATAAAAAA CATCCCCTAG AAAGGCCTCC AGAGAGGGGC
TGTGAGGCTC ACCCTCTGCC GCGCTCAGGA GGACCGCGG GCTCAGCCCT GGCCCCCTCA CTGCAGCCAT GGGTGGCGCC
TCCCCCTACT GCCTGCCAG GGCTCTGTCC AGGTTGCTCT TGATGGTGTG GAGGAAGTCC GTGGTGTCA GGAAGTGCTC
GTTGAGCTTC ACATTGCTGA GCGGTGAAT

SEQ ID NO:2408: (Length of Sequence = 239 Nucleotides)

ATNGNTTGG GGTGCGNAGA AATGGATGTG CGGAAGAAGA AGAAGAAAAA AAATCAGCAG CTGAAAGANC CAGAGGCAGC
AGGGCCTGTG GGGACAGAGC CCACAGTGA GACACTGGAG CCTCTINGNAG TCCTGTNCCC GTCCACCACC AAGAAGAGGA
AGAAGCCCAA AGGGAAAGAA ACCTTCGAGC CAGAAGACAA GACAGTGAAG CAGGAACAGA TTAACACTGA GCCTCTAGA

SEQ ID NO:2409: (Length of Sequence = 331 Nucleotides)

TCTCTTCAAG AATTTTCAAG CAATCGACCG TCCTGTCTCT TTAAGGCTTA GGAAGAGCAG TGTGGCTGCC CCTTTAAGGA
GGCGTTGCAA CAAACCATAT TGGACAGAGC ATGGGGGCGA CCCATCGGGA CCCGACGGGC CTCTGACTCC AGCAATACAG
CGAATCAGCG GCTTTGGGGA ATACATTTTT CGGAAAAAGA CTCTTCTCTC GGTTTCTGTC TCTGCACAG TTGAAATTTT

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GAATTTTTTT ATTTAGGTGG ATGCATTTTT NGTCGTGTTA CTGCTCTTCT CAGCTTTATT CAATAAACTT GCATTTTAAG
GGTTGTATTG GCAATTTTAA CTAAAAATGT GCATCATGAT GGAAGGTGCA GACCTTTTT

SEQ ID NO:2398: (Length of Sequence = 421 Nucleotides)

GACAGGTTGG TCTTACCCAC TGGNTCCAG TCATGCTGTA AACAGGGCTT GCTTTGGAGT CTGTCAGACC TGGCTTAGAC
CCAGGCTCTG ACCAAATGGG TGAGTTATGC AGCTACTTGG TGGCATCTAA TACCCTATCG CAAAGGACTG CCGTGAACAG
GAAGGAGGTG TCAAATTTGG CAGTGCCTGA TGAGGTGAGG CCAGGACCCA GGAACCTCTA TTCCCTCCCA TGCTCAGGAA
CAGTAAGTGT TCCTCTATCT GCAGAGGTAG ATGCTTAGCA CATCGTGGGT ACTTCACTCA TGATTGCTAA AATTTGAATT
TGTGGATAAA GTCATTTCAA AAGTCAGATT CTAGGACCAA AAATAACAATA TCTGTCCAAC ATGGAAGTGT TAGATCATGG
TTTTTCCTTC CAGCCCCAGG A

SEQ ID NO:2399: (Length of Sequence = 392 Nucleotides)

GATAAGCTTG ATATCGAAAG TNCCACAATG GGTGAGCTGT ACCAGGAACA CCATGAAGAA GACTTCTTTC TCTACATTGC
CTACAGTGAC GAAAGTGTCT ACGGTCTGTN AAGCTGCTGC CCTGAGCTG GAGGGGGGTC TCATTCTACA AAGAGAGAGG
TGGCCCCCTT TTCCTGACCT CTTCTCTCTT CAAGCTCAAA CACCACCTCC CTTATTCAGG ACGGGCACTT CTTAATGTTT
GTTGCTTTCT CTCCAGCCTC TCTTAGGAGG GGTAAATGGT GAGTTGGCAT CTTGTAACCT TCCTTTCTCC TTTCTTCCCC
TTTCTCTGCC CGNCTTTCCC ATCCTGCTGT AGACTTCTTG ATTGTCAGTC TGTGGTCACA TCCAGTGGAT TG

SEQ ID NO:2400: (Length of Sequence = 366 Nucleotides)

CTGGGGAAGG ACTGGCACA GTCCTGCCIN AAGTGGAGC GCTGCAGCAA GACGCTGACG CCGGGGGGCC ACGCCGAGCA
TGACGGGAAG CCGTCTGACC ACAAGCCGTG CTACGCCACC CTGTTCCGAC CCAAAGGCGT GAACATCGGG GCGCGGGGCT
CCTACATCTA CGAGAAGCCC CTGGNGGAGG GGCCGAGGT CACCGGCCCC ATCGAGGTCC CCGCGGCCCG AGCAGAGGAG
CGGAAGGCGA GCGGCCCCC GAAGGCCNCA GCAGAGCCTC CAGTGTACC ACTTTCACCG GGGAGCCCAA CACGTGCCCG
CGCTGCAGCA AAGAAGGTGT ACTTCGCTTG AGAAGGTGAC GTCTCT

SEQ ID NO:2401: (Length of Sequence = 385 Nucleotides)

CATCCACCA GGGATTAGGG TTCAAGTAGC AGCTGCTAAC CCTTGACCA GCCCTGTGG GACTCCCAAC ACAAGACAAA
GCTCAGGATG CTGGTGATGC TAGGAAGATG TCCCTCCCT CACTGCCCA CATTCTCCCA GTGGCTCTAC CAGCCTCACC
CATCAAACCA GTGAATTTCT CAATCTTGCC TCACAGTGAC TGCAGCGCCA AGCGGNCATC CACCAAGCAT CAAGTTGGAG
AAAAGGGAAC CCAAGCAGTA GAGAGCGATA TTGGAGTCTT TTGTTCAATC AAATCTTGA TTTTTTTTTT TCCCTAAGAG
ATTCTCTTTT TAGGGGGAAT GGGAAACGGA CACCTCATAA AGGGTTTCAA AGATCATCAA TTTT

SEQ ID NO:2402: (Length of Sequence = 392 Nucleotides)

AAAGAACTTG GTATCTCTAT TAAAGTACAT GANCCTCAA GGAAATAGA GCGATTTACT CTCTCTCAAT CAGTGCATAT
TTACAAGAAG CACAGAGTTC AGTATGAAAT GAGAACACTT TACAGATGTT TAGAGTTAGA ACATCTAACT GGAAGCACAG
CAGATGTCTA CTTGGAATAT ATTACGCGAA ACTTACCTGA AGGGGTGCCC ATGGAAGTAA CAAAGACACA ATTAGAACAG
TTACCAGAAC ACATCAAGGA GCCAATCTGG GAAACACTAT CAGAAGAAAA AGAAGAAAGC AAGTCATAAA GCCTTCAGGG
AGGCCATTTT TGCCTAAATT TTGAAATGAG GGTGGGCCAG ATGAGTATGT TTAAGTGGAG AGTGCTTTCC AG

SEQ ID NO:2403: (Length of Sequence = 179 Nucleotides)

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TCCATAGGTA TGTGGTAAGC CCAGGGAATC CAGGTAAGCT CAGGTAAGCC CAGGGTAAGC CAGGGAATTG TTAACAGGAA
GCTGGTGGGT TTCTGGCACC TNGACANCGA CTGAATTCTA GGTAGCTTGC C

SEQ ID NO:2391: (Length of Sequence = 200 Nucleotides)

CAGTTCAGCA GGCTATGAAA TTTGTTGGGC ATATAAANAA CTGGAACCTT CAACAGGGTG GTTTTGAAAC TAGNGCATT
ACCAATAAAT GNCAAACCCA CAAGGACAGT GCATTGTGTC ACATAGANGA TCTGGAAAGT ACAGCTGTAA ACTATAATCN
CCAGTCTCTG AGTTAGCACC TTTCCACGNT AGTCTCTTAC

SEQ ID NO:2392: (Length of Sequence = 234 Nucleotides)

TCGCTGAGGT GTTTGGTTTG GAATAGGGAA AAAGGTAAGA GACTAACGTG GAAAGGTGCT AACTCAGAGA CTGGAGATT
TAGTTTACAG CTGTACTTTC CAGATCTTCT ATGTGACACA ATGCACTGTC CTGTGGGGTT TGTCATTTAT TGGTTAATNC
TCTAGTTTCA AAACCACCT GTTGAAAGTT CCAGNTATTT ATATGCCCAA CAAATTCAT AGCCTGCTGA ACTG

SEQ ID NO:2393: (Length of Sequence = 337 Nucleotides)

TCCAGAGGCG GATTGAGAAG AAAGGAGATC CACATGAAAT GAAGATCACC TCTGCCTATC TACAGGACAT TGAGAATGCC
TATAAGAAAA CCTTCTCC TGAGATGAGT GAAAAATGTG AGGNTTTACA GTATTCIGCA AGGGAAGCTC AAGATTCAAA
AAAGGTGGTA GAGGACATG AATACCTGAA GTTCGATAAA GGGCCGTGGC TCAAGCAGGA CAATCGCACT TTATACCACC
TGCGATTACT GGTTCAGGAT AAGTTTGAGG TGCTGAATTA CACAAGCATT CCTATCTTIN TNCGGGAAGT CACCATTGGA
GCTCATCAGA CTGACCG

SEQ ID NO:2394: (Length of Sequence = 211 Nucleotides)

CAAATGTTTA TTTTATATAC AAAGAATTAT CATGGTTTTN CATTGAGTAG ATGCCCGGA TAATCCTCTG AAGGAAGAGC
ATTTAGTCCA ACTTAATGAA ACGATATCC TTGCGTACT GACGGAAACA CTGGCGGCAC ATATTGAGGC CATATTTCCG
GATCANACCG TGCCGGTTTG AACAGACACG ACAAGAGCGA GAACCTGCC C

SEQ ID NO:2395: (Length of Sequence = 335 Nucleotides)

CTGAAAGCTG TAACACCTC AGGTAATAAC AAAAGGGATT TTTATTTTAC AGCTAAAGGG AAAATAGGTG GAGAAGTTAA
AAAATAATGT CTGATCCTGT TCCTAAGTTC CAACTATAG CCAACACTCT GATGCTGCTC TTTTCTTGT AGGACCAACC
GTCCAGTTT GCCTGGGACT TTCTCATTTT TACAGAGTCC CAAATCCTAG GAACTGGAG CAACTGGTAC AACTGGTCAC
CTACTCTTGC CCTCTGGTA AATCAAGNCA ACTGTGACCA TCCAATGTC CATCTACAG GGAAGTTA TAACCCACTA
TTCCCCTATA ACATA

SEQ ID NO:2396: (Length of Sequence = 223 Nucleotides)

AGGGAGATCC AGCTCCGTCC TGCTGCAGC AGCACAACCC TGCACACCA CCATGGATGT CTTCAAGAAG GGCTTCTCCA
TCGCCAAGGA GGGNGTGGTG GGTGCGGTGG AAAAGACCAA GCAGGGGGTG ACGGAAGCAG CTGAGAAGAC CAAGGAGGGG
GTCATGTATG TGGGATTACA TTTTTTTTTT AAAGAAAGAA TAAATTAATT GTGATTAAAG TTG

SEQ ID NO:2397: (Length of Sequence = 379 Nucleotides)

CCATTACAAA GAATGTGGCA ACTTGCTTNT NCCTAAAAGG AGGAATTGGA ACTAGAATGT GTGACTCTGT GGGGACTGCA
TAGGTTTGT AATTGACCTA TAGCTAAACC TTAATGTGTT TGTGTGCTA TACATTGCTT TCCGCATTTT AAGACATCCA
GACGCTATTA CCAACATTTT CCTGTGCAIT AACCTCTGCA TGTGAAACT TTTAACAGTT ACTGAACATAT GTAAATATGT

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CCAGACTTCA TGTGAAGGTG GCTGCTCTG GGGTATGGT GGCTGGAGAG GCAGACTTTG AGGCTGCCAT GCTCTTATTT
TCAGAT

SEQ ID NO:2384: (Length of Sequence = 165 Nucleotides)

TTAAGACAAT AATGAAAGAT TCTGTACAAA GTTACCAAGT CTACAGGCTG AGCGAGCCAA GGGTAAGTGG GGCTGATCC
TTGTGGACGA ATGTCNCCCG GAGAGCTGGC CTCACCTGGG GGAGGCACGT TGAAAAAGTA CACATTTACA GGGCTCGGGA
AAGGC

SEQ ID NO:2385: (Length of Sequence = 297 Nucleotides)

GGTTTNNATT CATTCTCTTC TATTAACTTC TCTAAAGGAA ATTGGGCACC TGTAATCCCA GCACTTTGGG AGGCTGAGGT
GGGTGGGTCA CTTTNNAGTC AGGAGTTCAA GACCAACCTG GCCAGCATGG TGAAAACCCA TCTCTACTAA AAATACAAA
NFTAGCCAGG CTGGTGGTGT TCGCTGTAA TOCCAGCTAC TCAGGAGGCT GAGGCAGGAG AATTGTTTGA ACCTGGGAGG
CGGNGGTTGC AGTGAGCTGA GATCGTGCCA CTGCATTCCA GCCCAGGGTG ACAGAGT

SEQ ID NO:2386: (Length of Sequence = 290 Nucleotides)

AAAAAATAAA GTGAATTTAT TGGTTCATGT AACTGGAAAG TCTCATGAAA ATGTCAGCTT CAGGAGAAGC TTGACCCAGC
AGCTTCATGA TGTATGGAAA TACCTGGGTT TTTGTCTTCT NCTCTGCTAC TGTGGTATCA GCTTTATTCC AAGTCTGGCT
TCCTTTGTTG TTGCAAAATG CTTTGTGAGA AGAAGCCTGG GTCCATCTGT TAGGNTTAAG TTTACTCTGT ATGCTGTAGT
AGTGGCTATG ACAAGATTAG GAAGTGTATT TTCTCTCCC ATATTAAAG

SEQ ID NO:2387: (Length of Sequence = 356 Nucleotides)

GTCATCTGTA TTGTCACATG AAATGCACAT CCAAAACGGG TGACTTGAA ACGACCTATT AGGTCAACG GAGTCCGGCC
CCTGGGGGCA AAGCCTCATC GATGCCACG GGCGGTGGCC AGCACTTTCC TTGGGCTGTG GCGTGTGCAC CCGGCCTCCC
CAGCGGAGAG TCAGCTCACA CCCCAGGCCC TTTAGCTCTC TGGCAGCAGC TCCCAAAACG CACTTGAGGA ACCAATAATT
CCTTGGGGGT TAATAGCTGT TCCCAAGAA AAGGGTTCTG TGGGTCAAAT AAGTTTAGGA AAACATGGGT TAAAGAAGGT
TTAGGCAAGA AGCTTTTCTA TAGGGCTTTG TCAGAG

SEQ ID NO:2388: (Length of Sequence = 226 Nucleotides)

ATTATTGGTA TAAAACTTA AGACGGCATT AGAATTCTTA AGAAAAGGTG TAAAATTTAA AAAGATGTGC AAACAACAAA
GAATGCCCGA CCTGAACCA GACCTAAAGC ACCTCCANT TCCTCCACAC ATCATGCCCC AACACCATCC AGCCCAATCG
GACACCAGGA CAGTGAGGA CGGGTGGCTG TTCAGTGGGC AACAGATCTG GAAGGAAAGA TTTTCA

SEQ ID NO:2389: (Length of Sequence = 250 Nucleotides)

CCCAGCTAGG CCTTGGNATG GCINCAGTGA GGAGAAATCC CGGGAACGTG ATTGAACAA AGATTCTNAT TGCATTGTGA
TTTTTNTATT AAAGTTTGCA TGGTTCTTAA TAAAGGATTC AAACATAAGT TTGTAGTGAA ATGGCCTGGN AGATTCCAAG
GGCTTCTCIN GAAGGGGGAT TNGCTGCAN TGTAAGATTIN CCTCTGAAGG AGGCTGGCCC CAACTTGGN CCTCCTCATG
ACCCCTCTCT

SEQ ID NO:2390: (Length of Sequence = 371 Nucleotides)

CCTTTTCTG GAGAACGGGG TCTCGCTATA TTGCCAGGC AGGTCTCGAA CTCTGGGCT CAAGCTATCC TCCGCGCTCT
NAGCCTCCGT TTCCAGAAGG TCACCAAGTA ATATCTGCTT TCATCAGTT GCAGTTAAGA TTTTNNTTTC TTGAAATACT
GGTTTTCAAA CAGATCAGAA TTACCTGGGG AGCTTGTTTA AAATATAAAT GCCCAAGGC CAGCTCCAGG ACATTCTGAC

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CCTAAAGGCA TCCTTTTCGT AGTGTGTGTC CCATAGGTAT GGCTGCTGAG CACCAGGGCT GCTCACCATG CTCCAAGAA
GCAGAGTCAG GGAGGCAGAC AGCAGGGTTT ATTAAGGTGC ACACCCATGT CTGAGCCCCA GCTCTCTCCG NCTTCTGTGG
GGAGGAAGCC CTCGGTCTT TCCGAGGAAC CTTCAAA

SEQ ID NO:2378: (Length of Sequence = 454 Nucleotides)

GACGGGTCTT TCAATAGCAA GTTTTCACIT CATCGACAAC ATCACGAAGG TGGTAACAAA CAAATGCTTT ATCAGGCTGG
ACTTCATTTC AAACCTCCCC AAAGCACAGA TCCATTACGC ACATTTAAG ATACCATCTA CCTTACTCAG GTGATGCAGG
CCCAGTGTGT CAAAACAGAA ACTGAATTCT ACCGCCGTAG TCGCAGCGAG ATAGTGGATC AGCAAGGGCA CAGATGGGG
GCACCTTAT TGGAGTGA TACATCTGG CAAGCTCCTT CCTGGGGCTT CTCTTGAGTA CGGAGGGAAA GTGGAAAATG
CTTCATTACT TTGCTCAGAA TTCTTTGCT CCAGTGTGC CAGTAGGCTT TTGAGGAATG AAAACACGGT CTATATCTAT
GGGTGTGTCA GATCTTCACT CGGATTATTC GATGACACTC AGTGTGAGGA GTCC

SEQ ID NO:2379: (Length of Sequence = 224 Nucleotides)

GGAAGAGACC TCACAGGNA TTAAANGTGT ATTTTNTGGA CCTGGGCTTG GCTGGAATGC TCAGGGGTCC TGAAGATCCT
ATTATAGCTT CCTTCTGTG AACCATTAAG AAAAGATGGC GANAGTCAAC ATAAC TAGAG ACCTCATCCG TAGNAGATCA
AGGAGCGGGG TGCCCTTAGC TTTNAGCGGC GCTACCATGT CACTGTNCCC TTATCCGGC GGCT

SEQ ID NO:2380: (Length of Sequence = 274 Nucleotides)

AGGTTTGAAA TATCTTTTTC CAATAGATAA TCTTATTAC ATTAATACAG AATCATTTTA CATTCTTAAA TCAGACACTA
ATAGATGCTT TATTTTAGTG AATTATAAAG GAAAACAAA AGGAACTGT TGAGAAGTGT TCTTCATTAA CNGTCTAAC
GNCAGCCGA AGATCCNGNA ACACATGGAA ACTGCGNCAT GCINCCNGCA GAGGCTGGGG AATGGGGGT CTGCTCTCAC
TGAATGGTGG GGAACCTCA ACTGCTTAGC CTGT

SEQ ID NO:2381: (Length of Sequence = 312 Nucleotides)

GCACAAACAG TTTTATTGTA TGANCCACAG TGACTAACAG GNTCAGAAGA CAGTGCAGAT ATTCTGAAGA AGGCACTGNG
GGAGGTAAAG GGGTATCACA GCAGGCAGCC TCTCTGNTT CTNTCCAGT TCACAGATGA GTTCCAGGCA GGAAGTCTCT
GCAGGTACC CACGGCGGCC TCAGAGGGAC AATTNTTCC CTCTAGAAG CCINTTCCAG TGTTCACTGG ATGNTTTGAG
GACAGNTCTG GGCAGAGGAG GTGACTCTGT GAAAGATGCT ATCTTAAGAT GGGGAGACTA GGCTGTGAGG AG

SEQ ID NO:2382: (Length of Sequence = 402 Nucleotides)

CTTAAACTAA CTTTGAAGCA AGTAATGTCA ACTTTGAGCA CTTTGTGTGAG TTTTGAAAAA TCTTATTGTG TGCTGCACAG
GTTAATAAAT TATCAATTG TAATTCAGCA TGTGGTTCAG AGACACGGTC ACTGATTCAC ACCCAGTCCC TGCCACAGAC
CGTCTCAGAC ACGCAGAGTG GGCTGCTGC ATGATTCACA CCCAGTCCCT GCCACAGACC GTCTCAGACA CGCAGAGTG
GCCGTGCTGA TGCGTGTAC CTGGCTTTTG GCTCCAGCT CACTCATAGC CATGTCCACA TGGGGGGCTT GCACACAGGA
TCACTTCAT ATGTACATGT ACCCACCACA AAGTGCAAA GCTCCTTGCA CACATGCATG CACACAAACG TGGTACACAA
GT

SEQ ID NO:2383: (Length of Sequence = 406 Nucleotides)

GACCTTTTC ACTTAGCCCT CTGGGTTTG CAACATGCTT TCTCTCTCAC CTCTCATTG AATGAGAAAA AACAGCCCAG
CCATTTTTTG CAAACAGCAA AGCACCAGAG TGATGATGGC TTTGCTCATC TCACTTGACT TTCACAGTAA CTCAGTTTGA
TGTAGGCAGT CCAGGCATTA TTATTTTCAT TTACAGATG ATGCAACTGA GGCTCAGTGT GGTGAAACAT TTGGCTCATA
GCCACACAGC TGATAAGCAT CAGGGACTTG GGACCTAGGN CTTACATTT CAAGTCAGCT GTATCTGTCC CCAAGCCCCA

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CGTGGCCGCA GAGGCAGCTG AGCATGAGGG ATGGAGCGTG CTGCTGTCTT GCAGGTGCCG TTAGCCCTGT TTGCACTGG
TGGATTGATC TGCTCAGGCG CACAGGGAGA TGGCACAGCA GGACCCGCG CCCAGCCTCG CTGAGGGCAT GCTCCGCGCT
CACCTCCAGA GGCTGTTGGG CGGAAGCGAG AGCTGCAGCA GTTGGGGCCA GNTGGGACT GGAGGCCAG GTGAATCTTG
TGGGGCAGGG GACGGAGCTN AGGCTGTCCG GCGCGGGCCC TTCCACCCA AAGGCCCTAG AACCTAGGC CTCAATCTCT

SEQ ID NO:2372: (Length of Sequence = 326 Nucleotides)

AGGCCCTGGCA TGCGGCGAAA AGTTCCTGGA GAAGGCCTCC CCTCCCCAA AACACCGAG AAACGTGGG ACCTCATTAT
TGAGTTTGAA GTGATCTTCC CCGAAAGGAT TCCCAGACA TCAAGAACCG TACTTGAGCA GGTCTTCCA ATATAGCTAT
CTGAGCTCCC CAAGGACTGA CCAGGGACCT TTCCAGAGCT CAAGGATTTT TGGACCTTTT TACCAGTTGT GGACCATGAG
AGGGTGGGAG GGCCAGGGA GGGCTTTCGT ACTNCTGAAT GTTTTNCAGA GCATATATTA CAATCTTTCA AAGTCGCACA
CTAGGA

SEQ ID NO:2373: (Length of Sequence = 361 Nucleotides)

AGCAGAGCTG AGGGAAGCG TAGGATGGCT CCAGCTTCCG GTCAGTGGCT ACATGGTCAG TTCCATGATG GCGTTGACGA
TGTCACGTG GTGTGNTCTC AGAGCCGCA CGCCTTGGC OCTGGACACA TTGGCCTCG CCATCACCAG CTCAATGTCA
CGCAGTTCCA GCGCCGCTC GTCCACCTCT TCTCTCTCT CCTCTCTCT TCTCTGAC TCCAGCCTCA CCGGGGCGCT
GGGTGCTGAC TCAGGGACCA AGGCTGAGGG CTCTGAGGNN ACCTTAAACT TCTCAGCTGC GGCCTTGTGC ACTTGCTGGG
ACAAGGCTCT CAATCTTGGN CTCGCCAAG ACCACATAAG T

SEQ ID NO:2374: (Length of Sequence = 281 Nucleotides)

TGACTCTAGT CTGGCACTTA TTGATGACAT TGAGAGGCTG AAATATGAAA TINCAGAGGT GATGACAGAG ATGACAATC
TAACTTCCGT AGAGGAGAGC AAAACGACTC AGAGGNACAA ACAGATAGCC ATGGGAAGAA AGAAATCAA CATGGNTCCC
AAAAAGGAA TTCAGTTTCT AATAGAAAAT GACCTGCTAC AGAGTTCCCC AGAAGACGTC GCGCAGTTCC TTTATAAAGG
AGAAGGCCTA AATAAGACCG TCATTGGGGA CTACCTGNGG T

SEQ ID NO:2375: (Length of Sequence = 391 Nucleotides)

ATGTTTAGTG CTCTCTTCAG GAGCTCTGGT AGGCAGGTC TGGTGGTGAC AAAATCTCTC AGCATTGCTT TGCTGTAAA
GGATTTTATT TCTCTTCAC TTATGAAGCT CAGTTGGCT GGATATGAAA TTCGGGTG AAAATCTTT TCTTTAAGAA
TGTTGAATAT TGGCCCCAC TCTCTCTGG CTGTACAGT TTCTGTGAA AGATCTGCTG TTAGTCTGAT GGGCTTCCCT
TTGTGAGTAA CCGACCTTT CTCTCTGGCT GCGCTTAACT TTTTNCCTT CATTCAACT TTGGTGAATC TGACAATTGT
GTATCTTGA GTTGTCTTTC TCGAGGAGC AACCTTTGTG GCGTCTCT GTAAATTTCC CGAATTGAA A

SEQ ID NO:2376: (Length of Sequence = 324 Nucleotides)

CCAGCCCTCC CTCAGCTGG AACACAGCCA GGTGCCCTCA GACCCCTGNN TCTGCACAAG GGGGGCTG CCGCTGCCC
CAGCTATATA CACGACAGC CATCTGCTG GCGTGGACA AAAGCTGGGA GCTCTGTG CAGTCAGGA GCGCTACAG
TCCACCAGCT GCGCGGCGG GTCCAGGGC CCACTGTGGT GCCAGNAGT TINTCAAAC CAGGGGCCA GCGCCAGCTG
GNCCTNGCC AAGCCCCAG CCGTTTGTCT GGGATGGAGC CTCCACACTG AGGCTGGTAA AAGCTTGAAC TCAACAGCAG
CAAT

SEQ ID NO:2377: (Length of Sequence = 357 Nucleotides)

GTTTATGTTT TTATTATGT ATTTAACTG ACTTATTGT GTATCCCACT AGAACAATAC ATTCAATA TACTTGAGA
ACTGTGCCCTG GTGCGTCATG GGAGCAGAGA ACTGTCCAG TGAATAGTTG TTGAAGAAAG GAGTAAATC TCCCCAAAC

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SEQ ID NO:2365: (Length of Sequence = 423 Nucleotides)

TTTTTTGCCA TTATAAAGT ACITTATTGA TATTATATCA CACAGCACTT TACAGTATAC TCAAAGATAG CCTAAATTAT
 GAATTAAACA TGCAATATT TNCITTTTCCA AAATGTGGAC AAAATGTCTT TTAGAGTGCT TTTGAACACT AGCCTTAGCT
 ACTAAGCATT CATGGGTTTG ATCTTTCTTG CGACATGACT TTAAGTAAGT TAACAAAAA TGTAGCTGTA GACAGTAATT
 GTTTGATAAA TATGANCAGT TTAAATGG CACTGAATT ACATCTTTAA TCATTTTAAT AGGGCCATCC ACAGCCTCTC
 TTGTGCTCTT AATTCTCAAC CTCGGGGTTC TTAAAGGGC TGGTAAAGGC TCAGAAAGTG NCCAGCTCCA TGTGGGGTCT
 CTGTAAGNNG TCTATGCTT CAT

SEQ ID NO:2366: (Length of Sequence = 294 Nucleotides)

CCAGCCATAC ACATGCCTTT ATTTAGATCA GCTTTTTTCA AAATGCAGCC AAACCTATGA GTTGGACAGC CCAAAGTAAC
 CAGCCCTATT CCACTGAGTT AGTTTACCCC ACAGCAGTAG AACCAGTGTC TGGTTTGGTT CCTGGCCCAT GGTGGGACAG
 CGTGAAGGTG ATGGAGGGCT CTAGCACAAG GAGGTGCTGA GTGCCACCGG CAGGTGCTTC TGCAGACAGC CTAGAGCAAG
 GTAAGCAGGA GCACTCGNTT CAGAACCGAG GCGGCTCGGA CCAGAGGGCA GGCA

SEQ ID NO:2367: (Length of Sequence = 393 Nucleotides)

ACGGACAGAG CGAAGGGGAG AGGATGGTAG TGTCTGACTT CCACGTTTTC GTCAGGGATG TGTTCAGCA TGTGGATTCC
 ATGCAGAAAG ACTACCTTGG GCTTCTGTC TTCTTCTGG GCCACTCCAT GGGAGGCGCC ATCGCCATCC TCAAGGCGC
 AGAGAGGCG GGCCACTTCG CCGCATGGT ACTCATTCG CCTCTGGTTC TTGCCAATCC TGAATCTGCA ACAACTTTCA
 AGGTCTTGC TCGGAAAGTG CTCAACCTTG TGCTGCCAAA CTINTCCCTC GGGCCCATCG ACTCCAGCGT GCTCTCTCGG
 AATAAGGACA GAGGTGACA TTTATAACTC AGACCCCTG ATCTINCOGG GGCANGGGCT NAAGGTGTGC TTT

SEQ ID NO:2368: (Length of Sequence = 187 Nucleotides)

GATCTTGAAG TTAAACAGT GTTAGAAGT TTGGTGGGA AGACAATTNA GCAGTCTCTT CTGGANGTAA TGAAGAAGA
 AGAGCTGGCT AACCTGCGG CCAGTCAGCG TGAGTATGAA GAACTACGGA ATAGTGAACG TCCTGAAGTT CAACGACTTG
 NAGAGCAAGA NAGGCGACAC CCAGAAG

SEQ ID NO:2369: (Length of Sequence = 341 Nucleotides)

GTATCTTTAG TAGAGGCGGG GTTCCACCAT GTTGCCAGG CTGGTCTCGT ACTCCTGACC TCAGGTGATC ACCTGCCTCC
 TCGGCCTCCC AAAATGCTGG GATTACAAGC GTGAGCCACC GCGCCTGGCA CCATCAGTTT TTGATCCTGA TACTGTCTG
 TCCTCTTGGT TCTCCTCATC CCTAATTTAA CCTTGAACAC AAAATTCAAC AGGTTTTGGC ATATAGAATA AAGATTATCA
 GGCAAAGGCG CACTCTTGAC CTAATGATAT ATCTACATTT CATTTCTGA TCTATCAGCA ATATTAAATT TGTCTAGAAA
 TGATGAGAAG TTTAGAGGAG G

SEQ ID NO:2370: (Length of Sequence = 337 Nucleotides)

AGATCAAGAT CTCTCCCAA ATGCCAGTAT GCAAAGGACA CTTGGGGCAG CCTCTCAACA TTTTCTGCCT GACTGATATG
 CAGCTGATTT GTGGGATCTG TGCTACTCGT GGGGAGCACA CCAACATGT CTTCTGTTCT ATTGAAGATG CCTATGCTCA
 GGAAAGGGAT GCCTTTGAGT CCTCTTCCA GAGCTTTGAG ACCTGGCGTC GGGGAGATGC TCTTTCTCGC TTGGATACCT
 TGGAAACTAG TAAGAGGAAA TCCCTACAGT TACTINGACTA AAGATTGAGA TAAAGTGAAG GAATTTTTTT GAGGAAGTTA
 CAACACACAC TTGGATC

SEQ ID NO:2371: (Length of Sequence = 320 Nucleotides)

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SEQ ID NO:2359: (Length of Sequence = 352 Nucleotides)

CTTCATTAAAC AAGCTGCGAG AGAAGCTGGG TTGCCAGGAC GCCTTCCCCG AGGTGTACGA CAAGATCTGC AAGGCCGCCA
 GGACTGAGCT GGAGCCCGCC TGGAGAGACA GACACGTGTG AGTGGTCAGG CATCTTCCCT TCACTCAAGC TTGGCTGCTT
 TCCTAGATCC ACACTTTCAA AGAGAAACCC CTCCAGAACT CCCACCCTGA CAGCCCAACA CCACCTTCCT CCTGGCTTCC
 AGGGGGGCAG CCCAGTGGAA TGGAAAGAAT GTGGGATTTG GAGTCAGACA AGCCTGAGTC CAGTTNCCCG TTTAGAACTC
 ATTAGCTGTG TGACTCTGGG TGAGTCCCTT AA

SEQ ID NO:2360: (Length of Sequence = 359 Nucleotides)

TTTTTTTCAG CATAGTCATC TTAGCTTAT TGAGTAAGGC ATCCCAATCT CTGCTAAGAT TCTNCTAAAT GAACGGCTGA
 TTTTCTGCC AAACATGCA TTGGTCAAAG AGAAATCACC ACCTGGCCAC CCCATTCTGT CCCCCTACAG GACACTAAGG
 GTTCTTACAG ATAAAGGGAC GATGCATTCA TGCCCTGGAGA ACTAATCACA CCTGATTCTT CTGGGATCTA AANTAATGTC
 AAATTTTGAT TCACTTTATG TAAAGAAAAA TCCTTTTNTT TTINTGCAA CCNCTTTCAA GANCAATGCT GCCCATCCCA
 TGCAAGATGT TGTGTGAAGG CCANCTCTG GTATACTAA

SEQ ID NO:2361: (Length of Sequence = 437 Nucleotides)

CTCCAGGATT CCAATCCAGT CCGAACTCAA CACGAGGGGT GGCACCTACA GGCTGGGGTC AATCTGGAAG ACTGCCTGTT
 GTATGGCCTG GCAACTAAAA AATGTTTTT ACATTTTTAA ATGGTTAACA AAATTAAAAT AAGAGAATAT TTCATGACAT
 CATCAAATTA CACGAAATGC AAATTTACAG ATCTACAAAT ACAGTTTGAT TGGGACACAG CCACCCTCAT CCGTTTGCAG
 GCTATCCCTG GCTGCTTACA GGGTCCACAT AGTCATAAA GCCTGAGGAT ATTTACTATC TGGCCTTTTA CAGAAAAAGG
 TCCCCAAACA CTAAATCTGA AATGTTTGC ATCAGAACCC CTGTGGGGC TTGTTAGGAA TGCAGCTCCC TGGTCCACA
 NCCAGTCTCT GGATTCACTA AGTCTGGAGC AGGGCCT

SEQ ID NO:2362: (Length of Sequence = 317 Nucleotides)

CTTCTCTGGA TGTGCTGGG CTGGACTGG CTAGAATCTT TCTCTGGACT NTGTCATGTA CAGTGNCTCC ATCCTGGAGG
 CAAGAGAGTT GGGAGTGGCT CGAATCANAG CCGTGCCCAA GATATCCCTN CTGTTGCATC GTTGAAGCT GACGTCCTGT
 GTCINIAAC TGCTGCCACT GTTGINTCCT CGNCTGCTT GCTGTTGCCT CACGCCAGGN CCGTCTCTGC CGTGACANCC
 TTCATCCTAC CCTTGAACC CCAAGGCCAA GTTGGTTCAA ACTGTTGGAG AACAGAGTTG GCCTGCATCT TGAACA

SEQ ID NO:2363: (Length of Sequence = 412 Nucleotides)

GTCAGAGINT TGATAGTTCT ACTGGGAGAC CACAAAATGA CATGGTCCAT CCTCCTCCTT ATCCAAAGAT GCATGGTTAA
 AATAATATAG ATTAGGAATC ATCGTTACCT CCAACAGTT AATTCAATC AAATTTTATG CCCAGACTGG TTTTAAAGA
 CATTTTCTGC CAAAATTTT TGGAAATATA CACATTAAGG GTAGGTGTTG AGAACGATTA ATGGATTCAT TTTTATACTC
 ACATCTGTTT TGGAAATATA TTTTATGCAA TAAAGCATAA ACTAACAGGT ATACTTATAA ATGCTCTGTT TTAGAAACAC
 TAAAAGATCT CCAATCTTAG GAGGCCTTAA TTTGAAACTC TGCTTTTATT TGCTGAACCT AGTGGCTAAC CTGINTAGGC
 ATCTCACGAG GG

SEQ ID NO:2364: (Length of Sequence = 334 Nucleotides)

GAAATGATTT AATATTAGGA AAGGCAAGTN CCTCGAGACA TTTATTTAAG CTAATCTGTC CTTGATTTTT GACTTTTCAA
 TTCATTACAC CCAGCCACAT TAGCCTGCAC CATTAATAAC ATTGATTCAA CCTCTCTTAT TGGCATAGAC AATACATCTG
 CCTGTTCAC TACTCTATCC TCAGCTTGGT ATTCTCTAG CACAGAAGAA TGGTCCAGTA GATATGCTGA AGAAATACCT
 GAATGCATAA ATAAATAAGA AAATGAGAGA CTGAATGANT CAATTAATAC CTCAAGTGTT ACCCTNGATA AGGTTCTAGA
 GAGGGGAGGT TCTA

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CATCATTGGT AGCAAAGATT TACAGAAITG CAACATCACA CTGCGCATCC TCTTCGGGCC TGTOGCCAGC CAGCTTCCTC
GCATCTTCAC CAGCATCGGA GAGGACTATG ATGAGCGTGT GCTGCCGTCC ATCACAACCTG AGATCCTCAA GTCAGTGGTG
GCTCGCTTTG ATNCTGGAGA ACTAATCACC CAGAGAGAGC TGGTCTTCA

SEQ ID NO:2354: (Length of Sequence = 363 Nucleotides)

GGAGAGGGAT TGGCATCGGC ACCATGGAGC TCCCAGGGCT TAGAGATGGA GCAAAGTTGG CCTCACCTTG GGGAAACCATT
CCTGCTCCIG GATACTGGAA GACATTCIGC TGCACTINAG GATGATTCC AGTGCCAAAC TGTCCTCCTA TGTTTCCIGT
CATGCCTCTG CTCACCATGC TGTTCGGTGT GGCCAAGGAT GCTTCAGGAT TTNCTGCTAG TTGTGAAAAC GGGCTGGTAG
AAGCAGGTGG GGTTCCTGGG ATTTGTACCA TAGTTINGTG GATAGGGGAA TTGCTGTGGA GCACCTTGAG GAAGACGGGG
GTINCCCAT TNAACTGGTA GTCCAGATGA GGGAGGGAGG GTT

SEQ ID NO:2355: (Length of Sequence = 403 Nucleotides)

AACCAGGAAT GGAGGGCCTC CTCATGTCIG AGGTAGAGTA AGACGGTGTG AGGGGGCGGA CCGGGGGGCG GAGATGAGCA
CCGGCCGCAC TGGGGCATCA TCCNGGCCCA CCGGGGACGA TGGGCGGTGG GAGGGCTCAG GGCGGTGTGG TGGCCACACT
GCGAAGAATG GATTTTTTAAA ACACTTCATA GCCCGANIT TTTTCAGCT CCTCTTCGT GGACACAAC TCAAGGCTCC
CTGTCACTG GCTTTCGGGG GTGGTCTCCC CACTTGACGA GTCTGGTCTC CACAGGACAC CGTCTTCCC TTCCCTTCCA
AGGGGCAGGN CCCACGNACC CTCGCCCAA AANTAAAGGA GCTTGTGTT TGAAAACGCC AAGGCAAGCC GTCCAGGGGA
GCT

SEQ ID NO:2356: (Length of Sequence = 456 Nucleotides)

GAAAGAAAA CAATTGGTCA AACCACAAGA ACACTGTAC CTGAGCCTG AGAAGCCAAT TCAGATTCAA CCTGAATTT
GGTIGATTG GATTAAGTGA CGCAAAAGT CAATAGAACC ATTGANTTTC AGAAATCATA AAGTTGCACT ATGCCAAAGA
AAAGAGTACA TGTAATCAA GCGTAGATAG AAAACATCAA GCCAAGAAAA CAACACANTT CACATAATTT TTTTGGCCCC
GACAAAACAT TTAAGCAGTT AATTTTGT TTGTTTGT TTGTTGTTT TGAAGAACAN TTGTGGTCTT TTACATTTTC
TTGTGGGGAG AGCAAAATCT GATCAGCAAT AGTGCTGTGA AATACTTTTG GNTTATCATC CCCCAAGTNT AGGGTGAGAT
CATGAGGAAA NTTTTGGCAG TCCTTCTCTC AGATTTNGTT CACTNAAANT GCTTGG

SEQ ID NO:2357: (Length of Sequence = 412 Nucleotides)

CCACCCCATG CCCACAAGC CATATTGTCA ATAAATAAGG AATAACTGAA ACCAGACCCT TTAGGAAGAG ACAGAAATTC
CATTACCCAG GAAACCACTC AGTGAAGATG CTGATAGTTC TGATATGTTT TTATGCCCTG CCCCCTTCCC CCAAAAAACC
ACCTGCAGAA CCAAATGTTT CTCTCAAAG CCCATCAGCA CAGATTGATA ATAATATCAC TATCAAGCCA GGGCTAGTGC
TTCTCTACAT ACTGTACTGT CACAGGTACA AAGCAAGCCC TGGACAGATA CTGTCTCCCT GCCCCACAA ATCCAGGGAG
GAAAAAGACC AGGGANGCTT TGATTTCCTT GGGATTTAAA CCTCATGTTT AAAAAAGNTA ATAAAGGTGC TGTACTTGT
ATCTTCTTCC CT

SEQ ID NO:2358: (Length of Sequence = 399 Nucleotides)

AGATGGCAGC AGGTTCAGT GGGGCCCCCTT GGATGCCTAA GCCTGGGGAC GACTACAGCT ACAATCAGTT TTCCACATAT
GGGATGCCA ATGCCGCTGG TGCTTATTAT CAGGATTATT ACAGTGGTGG CTACTATCCT GCACAGGACC CGGCCCTGGT
CCCCCCCCAG GAAATTGCCC CAGATGCCTC CTTCATCGAT GACGAAGCAT TTAAGCGGCT GCAGGGCAAG AGGAACCGAG
GGAGAGAAGA AATCAACTTT GTGGAGATCA AAGGTGATGA CCAGCTCAGT GGGGCCAGC AATGGATGAC TAAGTCATTG
ACAGAAGAGA AAACCATGAA GTCAATCAGC AAAAAGAAAG GTGAGCAGCC AACAGGCCAG CAGCGGGGG AAACACCAG

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TGCTGCTGG GAAGTTCAAG ACAGTGGACA GACCATTCCA AAAGCCCAGC AGATGCACAC TGGGCCTGTG CTTGATGTCT
GCTGGAGTTA CGATGGGAGC AAAGTGTITA CGGCATCGTG TGATAAACT GCCAAAATGT GGGGACCTCA GCAGTAACCA
AGCGAT

SEQ ID NO:2348: (Length of Sequence = 363 Nucleotides)

GGCCTTTCAA GNAGCGGCGG ANTTCCCGCA CGCTGTAAG GAGGTACAGC AGATCCGCGA CCAGCACCCC AGCAAAATCC
CGGTGATCAT CGAGCGCTAC AAGGGTGAGA AGCAGCTGCC CGTCTGGAC AAGACCAAGT TTTTGGTCCC GGACCATGTC
AACATGAGCN AGTTGGTCAA GATCATCCGG CGCGTCTGC AGCTGAACCC CACGCAGGCC TTCTTCTGTC TGGTGAACCA
GCACAGCATG GTGAGTNTNT CCACGCCCAT CGCGGACATC TACGAGCAGG AGAAAGACGA GGACGGCTTC CTCTATATGG
TCTACGGCTC CCAGGAAACC TTCGGCTTTC TGAGNCAGCA GTA

SEQ ID NO:2349: (Length of Sequence = 332 Nucleotides)

TCCTCCTACT GATGCTTTTC AGTAGATTCA GAAGTGATTG TGGCAAACAT AGTATCTTGA AGGAAGAGAT CGTGTTTTGA
TTAGCATCTC CGAGCGCTAG TTTTGTGTTT ATGTTTCATGG TATTGAGGAA ATAAAGATCA ATTTGGACTT CTGACACCTG
TTAATACATC CTAGTTCCCTG ACTGCAGCAA AATGACTCTC AGTGCCCCCTT TCTCTTCTTA GTGATTGCCCT AAGATGACAG
CTTCATTCCC TTITAATTAT TATCCACCTT CTTCGCCATC TTCANTTGTT TTCTCAAGTG AGGGACTTGG CCTCTACTGG
GACTCCACTG GG

SEQ ID NO:2350: (Length of Sequence = 339 Nucleotides)

GAGATGGAGT CTCACCCCTT CGCCCAGGCT GGAGTGCAAT GGCACGATCT CAGCTCACTG CAACCTCTTC CTCACAGGTT
CAAGCAATTC TCCGCGCTCA GCCTCCGAG TAGCTGAGAC TACAGGCGTG TGCCACCATG ACCGGCCAAT TTTTGTACT
TTTAGTAGAG ACAGGGTTTC ACCATGTTGG CCAGGCTCGC CCCGAACCTC CGACCTCATG ATCCACCTGN CTCGGCCTCC
CAAAGTGCGG GGACCACAGG CATGAGNCAC CGCACCCAGA AAAAGCAAAT CTCITAGTAT TTTTCTCTT GTCCAAAAGG
TTCTGACCAT GTTCATGAC

SEQ ID NO:2351: (Length of Sequence = 354 Nucleotides)

AGAAGGACCT GAGTGTGGC CAACAACAGG CTGCAGAAAG GCAATGCCAT CCTGAAGATT TCTCAACTAA GAGTCTGCAC
CCATGACAGC CCACCGAGAC CCTCGCTCCA AGTTGTGGA GAAAGGGAAC CCGCTTGGCA GCATGTGGAA AGACCCACG
ATGAGCAGCA GACACAGCAA CGCTGCCTCC TACATCTCGA CAGCATCTGT GTAAGACTCG CTAGCATCTG GTGCACACAC
TGTATGAGAC AGCAACAGCC AGAACAGACA GCTTTACGTT GATGAACACA CAGACGGTGG CGCATGTTCA GAGATGCCGA
GGGACGCCG CAGTTCCCAA AATCACCTCT GGCC

SEQ ID NO:2352: (Length of Sequence = 378 Nucleotides)

GTGTTTGTGTT TAGTGGAAAC CTCAAATCAA AACAGGCTC ACGGTCTGAA TAGTCTTCTG GTCTAAGCAA CTCAGCACCA
GCGCGCCCAA GGGGAGGCCG CCTTGTCTCT GGCCCCGGA AGAGACGCGC CTCCAGCCCC GACGCAGACC CCATGGCGCA
CACAGGCAGG CAGAGCTCGA GGTNCAGGCG GCTGCCTTGC GGAAGTGC TGGGGGAGGG TCCCTNGCTG AGGCTGCACC
AAGGGCTNGG GAGAGGCCCA GGAAGGGGAG AGCGAGCTGN GAGCTTGGGA TGGGAGCCGT GAGGTGGGGA TGGTTTNGCA
GAGGGGCAGA GCCAAGNCA GAGGCAAGTT CTNGGGCCCC ACAAGCTTAT GGTGCGCA

SEQ ID NO:2353: (Length of Sequence = 369 Nucleotides)

CTGCCTTATA TAATGTGGAT GCTGGGCACA GAGCTGTTCAT CTTTGACCGA TTCCGTGGAG TGCAGGACAT TGTGGTAGGG
GAAGGGACTC ATTTTCTCAT CCGTGGGTA CAGAAACCAA TTATCTTTGA CTGCCGTCTC CGACCACGTA ATGTGCCAGT

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TTTTGCTTAT TACCCGATTT ATTAGAGAGA TCTCTAAAAA GACGGGGTGT GGCGGGGGTA GGTGGGCGAG GAACCTGGGA
 TGCAAACAG TGTTTGGGGC CAGGAGTGGC TGTATGGTTT CANAGGCGCC CACCACTCTG GGTTTGAGGG ACACAGCACC
 CTGCTCTGG CGCTTTGGAT TATCAGCAC CAGACCACG GCGGAGGAA TGGAGTGGCA TCCCTGGGGG GAGTTAAGAC
 ACACGAGGTT TGCAGTTTCA TTTTGTTC GAATCAGTTT GGCCATAAAA ATGGGACT

SEQ ID NO:2342: (Length of Sequence = 316 Nucleotides)

CCTGAACAAG GTGTGGTGG TGTTGAATTC TCCCAAGCTG CCATCAGAGG ACCTTCTGTG GCTTGACATT GGCGTCCCCA
 TCATGGTGGT CCGTACTGAG AAGAACAGTT TNAACAACG ATTCTTACCC TGAATGAAA TTGAGACAGA GGCCATCCTG
 TCCATTGATG ACGATGCTCA CCTCCGCCAT GACGAAATCA TGTTTGGGTT CCGGGTGTGG AGAGAAGCTC GGGACCNCAT
 CGTGGGCTTC CCTGGNCGTT ACCACGCATG GGACATCCCC CATCAGTCTT GGNTCTACAA CTCCAACCTAC TCCTGT

SEQ ID NO:2343: (Length of Sequence = 380 Nucleotides)

GGAAGAGGAG GAAGGTGGA CCTTCATCAG ACCACTCCCT TCCCCCATCC TCCAGGAGAG GGGGCAAGGG CAACCCACCA
 TCTACCCACT TACTAACCTG GTCTAACCC CCTTACTGTG CGCGTGTGTG TGCGTGTGCG CAGCTCTGG CTGTTTGTCT
 ATATGTCTAG CTCATCTAGT TCCTCTTCTT AAGGGGATGG GGGTCAGGG CTAGGGGAGG GGGCTGAGTT TCCCCACTTT
 AGGAGGAGGT GGGGGCTATT TCTATGCAA TAGAAATCAG CACATTCCTC CTACTTCCCT TTCTCCACT CCCCCATAT
 CTTTAAAGTG TGAAGCAGA AAAGGACCTG CATTTTCTCT ACAATTGAGG AGCTGACATA

SEQ ID NO:2344: (Length of Sequence = 282 Nucleotides)

GGGAATATAT TTATGCAAT TTATTGAAA TTATTGTAA ATAAAGNTTT TCNCAGTGGN CTAGAAAANC AGCTTGAATG
 NCAATCAGCA TTATTGAAG AAGGATGACA TCCCTNCCAC TTATTGCACA AACTTGGTAG CTTTGAGACA AATACAGTAG
 CACAGTCCGT TTGAAGATT GTCCAAAAA TTAGTCCATA TTTTAGTGGC TCAGTGTCAA GNGTTCCCTC CCTGTGCCCC
 CACTGTGCT TCTGCAGTGA TAGGAAGGAT GAATGCTTAA TT

SEQ ID NO:2345: (Length of Sequence = 256 Nucleotides)

CTTTATAGGA AGCTGCAAAA GAAATGAGCA GAGCGNGATA TTTTGGTAA GGGATACAAA GAACATACAA TTGTGTACTT
 GAGAGGTTT ATGGAACATT ATGACCCATC CAATGNAGAC ATCAACATTA ACAACAAAA TTANTTGAGG AAGAGCAGTA
 TGAAATATT CTAATGCAGT GCTGTCCAAC AGAAGTTTCT GTGGTGATGG AAATGTTCCA TATCTTTGTG CTAATACAGA
 ATCTACCAGC CACATG

SEQ ID NO:2346: (Length of Sequence = 437 Nucleotides)

GTTGAGATTG ATGCTTCINT TTTTGTGTC CGCTGCTGCC CTGCGCTGG GAGCGAGCC GGAGGGAAGG CGGTGGAGAG
 ATGATTGCAG AGTTGGTGAG CAGGCTCTG GGGCTGCTT TGTATCTCAA CACCTGAGT GCGGATTTCT GCTATGATGA
 CAGCGTGTCT ATCAAGACTA ATCAGGACCT TCTCCAGAA ACTCCATGGA CGCACATTTT CTACAATNAT TTTTGGGGGA
 CTCTTCTAAC CCACAGTGGC AGCCACAAGT CCTACGGGCC ACTCTGCACT CTTTCTTTTC GCTGAACCA TGCCATTGGA
 GGGTTGAATC CCTGGGAGCT ACCATCTTGT CAATGTCTG TTGCAATGCA GCAGTCACTG GTCTCTTAC AAAGCTTCIN
 CAAGATCTC CTTTGGTGAT TGGATACTGG ACATTC

SEQ ID NO:2347: (Length of Sequence = 406 Nucleotides)

CCGGGCGCC GCTTTCGCC GGGGCGAGAC CCCCAGGTTT AAAATGAGCC TGTTTGGAAC AACCTCAGGT TTTGGAACCA
 GTGGGACCAG CATGTTTGGC AGTGCAACTA CAGACAATCA CAATCCCATG AAGGATATTG AAGTAACATC ATCTCTGAT
 GATAGCATG GTGTCTGT TTTTAGCCCA CCAACCTTGC CGGGGAAGTT TTTTATTGCA GGATCATGGG CTAATGATG

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SEQ ID NO:2335: (Length of Sequence = 386 Nucleotides)

GCCTTTTGT CATGGTAGCA AAGTGGCTGC TGTTGGCTCCA GGCATCACAC CCTCAATCAA GGTAGGAAGA AGAGGCCCCAG
 GGAGGTGTTA GCCATGCCTG TTCTTTTAT TGGAAAAGCT TTCCAGAGG CCCAGGTAGA CTTCCTCTTC AATTTCATTG
 GCCACACCTG ATCACATAGC CATCCTAAGC TGCAAAGGAG ACTGGAACAG TGAAAATCTG GATTTCACAGC CTCCACAGTT
 GGAGTGGCTG GAGATACAGA GTTGGGACGA CCCCTGAAAA GTGAACCAAG GTCTCTGCA CGGCTGCCCT GGAGGGCGTG
 GTGCTTGAGG TCCCTTCTAC CTCTGGGGCT TCATGGAATG ACTTGTGTC TCCATGGAGC ACCTCT

SEQ ID NO:2336: (Length of Sequence = 258 Nucleotides)

CCCTAGCAAA CCACTGATGA CCGCTGNA GGGGCCAGCC TGTCGGTCT CTGGGCCTG CAGCTNTTC TTTAGGGTTA
 GCGTGGTGC CGGGTCACT TTCTGAATCT TTTTTTTTT TTTTCAAAA GGAAAGTTT TAATGGAAAG TTGAGCCAGA
 ACTAAACCAG GGAGCTGTCT GAAATCATG CCCCCATCC GGTGGCGGG GAGATCAACT CCGAGCTGTT TTTCCGAGGC
 AGTGAGGAAC GGTGCCCG

SEQ ID NO:2337: (Length of Sequence = 338 Nucleotides)

ATCTCTTTC CCACTTCATA AAAGCAAAT ATGTAAGACT AGCATCTGTT TTTGTCCCA ATAAAAAAT CCCACAATT
 TCAAGATATC ACTCTAGCTT TCTAAAGTAG AAAGGCAAT CAGGCAACAA AAAATATTT TTAATAATCT ATAGCCCAA
 TCACCAAAG GTAAGGAAG AACTTTCCTA GCAAGCTCTG GAGAAGACCT AATTGNCAT TCAAAATGGA GCTTTCAGAC
 ACTAATCAAG GCCATTAATT AAAAAATTT TTTCAAGAAA ATAAGGCAGG TTGGATCTCT TTTCCACTT CATAAAGCA
 AAATATGTGG CAGACTCT

SEQ ID NO:2338: (Length of Sequence = 410 Nucleotides)

GGGTCTTGT ATGCTGCTA GGTGGTCTT GAACCTTCA ACTGAGTCT TGACCTCCA GGCTCAAGTG ATCTTCTTAC
 ATAGGCCTCC CAATGTGCCA GGATTATAGG CATGACCACC ATGCCAAGCT CCAGATGGTA TTCTTAATTC AGCTCACAAT
 GTGCCCTCAT CAGATTGCTA GTGGCCAGGA GTGAACAACT GAGTGACTTT AAGAATCAGG ACACCAGGAA TATGTCTCTA
 GAAAGTGAAG GTATGAGTGG AAAACCTGGG TTGGATTATG AACAAGGCC ACATGTGTGC CAGAGTGGCC AGGGCAGGGA
 GCAGCAGCAG GTGCTGGTGA AAGGAAGGTG GATTACTGGG GGCAATGCT GTCTTGTGT TATGGGTTTC TTTTGAGGGA
 AGTAGATAAG

SEQ ID NO:2339: (Length of Sequence = 336 Nucleotides)

AGGGGAGGAG GGGGCTAAGG GCGCTGGAG GAAGAGCGAA ANAGATGGAA GCCTTCCGGC AGAAGGCAGA GCTGGGGCGT
 TTTTGAGAC ATCAGTATAA CGCTCAACTC AGCAGACGCA CACAGCAGAT CCAAGAGGAG CTGGAGGCAG ACAGGCGGNT
 CCTGCAGGCC CTCTCGAGA AGGAGGACGA GAGCCAGCGC CTCCACCTGG CCAGGCGGGA GCAGGTCATG GCCGATNTGG
 CCTGNTGAA GCAGGCCATT NAGGNCAGC TTCAGCTGGA GCGGCGCGG GAGGCAGAGC TGCAGATGCT TCTTGAGGGA
 GGAGGGCCAA GGAGAT

SEQ ID NO:2340: (Length of Sequence = 290 Nucleotides)

TTTATAGTA GATGGGGGT TCTCTTGT GTTCAGGCTG GTCTGAACT CCCGACCTCA GGTGATCCAC CTGCTCGGC
 CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CACNCGGNC CGGCTTCAG TTTCTTCTA GGCGTCTG TCACCCAAAT
 AGCTGCTACC CAGAGNGGG GGGTTGACCT AGGTGAATA TCCACTTGT TTTTATGGAT GGCTNCTTC CCCATTGON
 CTTNCCAGA ATATCTTTC AAGTNCANT TTCCAGGGG AGCTCTTGG

SEQ ID NO:2341: (Length of Sequence = 298 Nucleotides)

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GGCCTTTTAA TGCCATAGCT AGTGATGATT CANTCAAAGC ATCAGTCTAA GGAAGGATGA TGGGGGAAGG GACCNAGAT
CACAGNCTT CTCCTT

SEQ ID NO:2329: (Length of Sequence = 383 Nucleotides)

AGTAGAGACA GCATTTCAIT ATGTGGCCA GGCTGGTCTC GAACCTCTCA CCTCAAGTGA TCTGCCTGCC TCGGCTCCC
AAAGTGGGG GATTACAGGC GTGAGCACNC ATGCCTGGCC TTTTTTTTTT TTTTTTTTAA CGAAGTTATT TTCTAGAGC
ATTCATAGTT TGTTTTTATA CAGTTAAGGT TCTCATCCAT CTGGATTTTT TGGTAAGTGT GGGGAGAATA AAATGAGGAG
CCNCTGTTTT TTCTCCAAA TGGCATGTAT TGTCACAACA CAATTTATTG AATCAATAAT TCATCTCTCC CATACGAATT
TAAACTATTG AACTTTTACA TCAAATTTT GGAACACAA AGTAGGTTA ACAAGGTGAG AAC

SEQ ID NO:2330: (Length of Sequence = 392 Nucleotides)

CGAAACGNYC TCAACCTATT CTCAACTTT AAATGGGTAA GAAGCCACT GGTGAGCATG GCAAAGCCCC AGCTCTAATA
AAAAATGCAA AAAATTGGCT GGGAGTGGAG GCGGGCGCCT GTAATCCAG CTACTTGGAA GGTGAGCTG GGAGAGTTGC
TTGAGTCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCAC ACCACTGCAC TCCACCTTGA GCAACAGACT GAGACTCTGT
CTCAAAAAA AAAAAAANT TATGCAAAGT GTCTTTTCCA ACAAAGTGT AATGAAGCTA GAAGTCAATA ACAGGAAAAC
CTGGGNGAAT TTGCAAGTAA GTGAAAGTTA AACAACATTC TTAACCATG GCTCAAAGGA GGAAATGACT GG

SEQ ID NO:2331: (Length of Sequence = 284 Nucleotides)

AAGAAAAGTA AATTCATCTT GCTCAGATC CTTTCTGGAA GAGTTTAGAA AGCAAAGAAT TCACCGACTC AGCAGGAAGC
AGAAAGAGCT GTTCTTCTT TTGACAGCA CAAGCTAATC CCTAGAGAG TGGGGATGTG GGAAACGGAG GGTAAATTAAT
TCTTTGGTCA CTGGTTCACT GCTGAATAGC CTTGGTCACT TTTGGCTCTC TCTATTTTA GGGGGAAAAA TATTTTNGTT
TCITTTTTTT AAAAAATAAA ATGTCGCAC AATGGGAGAA AATT

SEQ ID NO:2332: (Length of Sequence = 349 Nucleotides)

ATCTTAAAAA GATTTTTTGT ATTINCTTT GAGACTGGGT CTCAGTCTGT TGCCAGGCT GGAGTGTAGC AGCCTGATCA
TGGCTCAGTG CAGCCTCTAC CTCCCGGGC TCAGGTGATC CTCCCTCTC AGCCTCTGA GTAGCTGGGA CTACAGAGGT
GTGGCACCAT GCGCGCTAA TTTTGTATT TTTTGTGGAG ATGGGGTTTT GCCATGTTGC CCAGGCTAGT CTTGAAGTCC
TGGATGTGAG CCACTGCGTC TGGCTTATTA TTTTAAATAT AGTTCTCTTT ACTGCCAGTA GCTTTCATAT AACCTAGCG
ACTAGATTTA GTCACCACTG CTTAATTCC

SEQ ID NO:2333: (Length of Sequence = 353 Nucleotides)

CCACCTCTCC GTTCTCTGCT TCINAACCAC AGCCGCATCC TATTGTCAGC CCTCAAGATT AAGGATGAAA ATTTGACTTT
TTAATTTTAT TATCTTGTGT CTTCCTTCCT ACTTCATTAG AATCATGTTA TTGGCCTAAA ATACTGTATG TAAAGGATGC
TCTGGGGCCC ATCTGGAAGC CTGCATTCTC TGGGGATATA ATTACGCTAA GCAATTTTTC ACCAGGGACA GCATGACTTA
GCTTCTACCT GGGCATCTC TGGCAACACA GCGCTCAGTT CTTCCAAAGG GATTGGCTGC TGTCCCTTCA GGCCTTCTTC
TTGNGTGTGT GTGTGTGTGT GTGTGTGTGA TTC

SEQ ID NO:2334: (Length of Sequence = 279 Nucleotides)

GCGCCTTCTA CNAGCTGCTG CTGCCGNCCT CATNCTGGTG GCGATGCTGC AGCTGCTCTA CTTGTGCTG CTGTCCGGAC
TGCACGGGCA GGAGGAGCAA GACCAATATT TTAAGTCTT TCCCCGTCC CCACGGTCCG TGGACCAGGT CAAGGCGCAG
TCGNAACGC GCTGGCCTCT GGAGGCGTCC TNGACGCTAG CCGCATTAC CGCTCTACA GGGGCTGCT GAAGACCACC
ATNGACCCA ACNATGTGAT CTTGGCCACG NAGCCACG

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TTGACAAGTA AGTGTATATA TTTAAGGTGT ACAATGTGAT GCTTTGATAC ATACAGTGTG AAATGATTAC CACAGTTAGG
 TTTAATAATT AACATATCCA TCATCTCACA TAGGTATGAT TTCCTATGTG TGTGGCGAGA ATCTGAAAA TCAACTCTGA
 GCACATTTCA AGTGTACAAT ACAGTATTTA TGATAGTCAC CATGCTGTGA ATCAGATTGC CTACCTTGGT TAAAGTGCAG
 ACTCAGGTGA AGGTCTGGAT GGAGGATCAT ACTTTAATTG ATTTAGACTC TAAATATAAT GTATATAGTT ATTTTGTCTA
 ACCTAANGAA CCTACTCATA AATGGGCTAG TG

SEQ ID NO:2323: (Length of Sequence = 316 Nucleotides)

GAGACAGAGT CTCTCTCTGT CGCCCGGGCT GGAGTGCAGT GGCACAACTC AGCTCACTGC AACCTCCGCC TCCCAGATGT
 CCAAGTGATC AAGGGGTTC ATTTGCTCTT GGGGGATTAG GTATCATTG GGGAGGAAGC ATGTGTTCTG TGAGGTTGTT
 CGGCTATGTC CAAGTGTCTT TTAATAATAG TGGAGACGGG GTTTCACCAT GTTGGCCAGG CAGGACCTCA GGTGATCTGC
 CCACCTCAGC CTCCCGAAGT GCTGGGATTA CAGGCATGAG TCACCACACC CGGCTTCATT TATTTCTTTC TCCATG

SEQ ID NO:2324: (Length of Sequence = 300 Nucleotides)

GGGACAGGA GGTGACCTCG CGAGCAGACG CGCGCNCAN ACAAGCAAGC CCGCCCCGGC CTCTCGGGAG CCGTGGGGCA
 GAGGCTGGG ANCCAGGAG GGCGGAGCC CTCATGANTT CANTNACCTG CTTCTCCCCC TTAGGTTCTA TCAGCCACAG
 TTTCTGCAAG TTTCCAAGAG CAGCAGAAA TGAACACATT NCAGGGGCCA GTTTCATTCA AAGATGTGGC TGTGGATTTC
 ACCCAGNGG AGTGGCAGCA ACTGGACCCT GATGAGAAGA TAGCATACGG GGATGTGATG

SEQ ID NO:2325: (Length of Sequence = 303 Nucleotides)

CTGTCTCAA TAATAATGAT AATATTINCT TATGCTTACT TTACTGTAG ATTACAGTAT ACATTACAAC ATATGCGTTT
 ATTGACTGTT TATGTTATTG ATAAGGCTTC TAGTCAACAG TAGGTTACTA GTAATTAAST TTTTGAGGAG TCAAAAGTTA
 TGTGTGGATT TTCAACTGTG GACTTTGGTG CCTCTAACCC TGTGTTGTTT AGGGGTCAAC TGTGTATTCT TTCTGTGNA
 ACATTTTATG ATGTTATAGC CTTTAGACAT TAGAAATGGA AATTTAGTTG AACTCGNGTG TTC

SEQ ID NO:2326: (Length of Sequence = 348 Nucleotides)

GTTGCTCTCG TGTGGCAGAT GACACAATCT CTCCCGTCCC TGGAGGCCAG CTCCCCCGTG GCCAACCTCA GGCTCCCAT
 GGCATCTCAG GGCTCTCCA GCCAGACTGG CGCCATCCAA TTAACCTGAT GGTGGCTGAG CAGCTCAGCT CTGTGCCAGC
 CCCTGCAGGA GCCAGATCAT GTTGCCAGG CCCAGAGGT AGCCGTCTC ACGGTTGCCN TCAGCCAGG GCAGCCTGTG
 GCTGAGCGTC TGTGGTCCG GCAAGGCCAC CGTCTTCCG AAGTCTATCA TCCAGACCTT GGCCAGGCCG GTGTGGTCTG
 GCACGAAGAG GAGGGAGCTT CCTACCAC

SEQ ID NO:2327: (Length of Sequence = 392 Nucleotides)

AGCTGTTTTT TCTAGCTGC CAAGACTGTT GAGGAAGATG AGAGAATTCC AGTACTAAAG GTATTGGCAA GAGACAGTTT
 CTGTGGATGT TCTCATCTG AAATTTTGG AATGGAGAGA ATTATTCTGG ATAAGTTGAA TTGGGATCTT CACACAGCCA
 CACCATTTGA TTTTCTTCAT ATTTTCCATG CCATTGCAGT GTCAACTAGG CCTCAGTTAC TTTTCAGTTT GCCCAAATTG
 AGCCCATCTC AACATTTGGC AGTCTTACC ANGCAACTAC TTCATGTAT GGCTGCAAC CAACTCTGTC AATTCAGAGG
 ATCCATGCTT GCTCTGGCCA TGGTTAGTCT GGAAATGGAG GAAACTCATT CCTGATTGGC TTTCTCTTAC AA

SEQ ID NO:2328: (Length of Sequence = 256 Nucleotides)

ACGAGCACAC TCTTCACAGT GGGCGGAAC ATCAGAAAAT GGGAGCCTTC TTCTAATGGC TGTCNTTTTC TGTGGGAAA
 AAAAAAAAC AATCCTCCA AACCACACCG GATGGTTGTA AAAAGCTGCA ACGGAACCTT TGGCACCNGA TGAGAAGAGA

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AATCATAGCT TACTGTGGCC TCGATGTCT GAGCTCAGGC GATCCTCTCC TTATAGCCTC CAGAGTAGCT GGGACTATAG
 GTGCGTGCCA CCACACCCCTG CTAATTINAT GTTTTGAAGA GACCGGGTCT CACTTGTGTG CCCAGGCTGG TGTCAGACTC
 CTGGGCTCAA GCTAAATCAC CCACCTTGGC TTCCCAAAGT GTGGGATTA CAGGTGTGAG CCACTGCGCC CAGCTCTGAT
 TTTTGTATTT CTTACTTAAG GCGACATACT TAGTAGCTGT GCGTCTTGGG GCAGATACCT CCCAAAGCCC CAGTCTGTGTC
 ATCTATAAAT AATGTAAACA CAGGGCCCCG CTGCAGGGT TGCTGTGTGC ACATATGTGT GTGTACGTAC CCATGTGCCT
 NTACGAGAAG GGCT

SEQ ID NO:2317: (Length of Sequence = 166 Nucleotides)

GCAGTACTA TTATTAACAT TACAGTACCA AGCATCCGCA AGAGACAGTC ATTGTINATT TTNATCAAG AAATAGGGCT
 GTTTTATACT GTTATTGACA TCAACTTTT CCCAGTGCAT TTTTCAAAA TATTAATAAG TTCATTCCTT TGTCCTTTTA
 ACTTCC

SEQ ID NO:2318: (Length of Sequence = 374 Nucleotides)

TTTATTTTAC ACTTACAAAA GAAATCGCCC ACCCCTTTCG CCCATTCCCC CAAAACAGTC TCTTTTACAA AACATTTAAA
 AATTAAAACC AAATGAAGAT AGACAAGTAA ATTTCAGTAC AATTATTTIN CAGTGTAGCT GTCAATAATTA GAGTTTAAAT
 TTCCTACAAG TGACCAATGT CCAAGTACT TATAGGGAAA TCCTGATTAT CGGCCAAAGG AAATCAATA TTACAAGTTA
 GCAATTCCTT AGTACAAAA TAGTCCGTT GTTGGAACAG CTTTTCCTTG TTACATAGGT CTTAGGTGAG TCTGCTGTNA
 ATACCTTAAC GNTTCGGAT TCINNTTCA CAAATG AATCGTCACT GCTG

SEQ ID NO:2319: (Length of Sequence = 280 Nucleotides)

CATCTTAGTT CATGGTAATC TCCTTGGCAG CACTTATTGT CTTGTGTGA GAGCAAATGA TAGAGTCATC CATTCAAGTT
 AATTAAAGAGC ATCTGCATTG CAAAACGGT CACTAAATTG CTGCCAAAT TTGAGGCTTT TTCTCTGCA ACACAAATTA
 ATTTTAAAG TAGCAGCATT TTCAGGAGAG ACCAAATAAA GAAAGCAACA ATAAAGTTGC CTGTCTAGTG AGATGTCCCC
 AAACATCAA CTTTAAACAT ACCTTTGCCT TTNATAGTAG TTCTTACAC AACTGCTTT AATCAAAATG CGTGTCTCTT
 GCTCTGTAT TTTATGTTTT GGCTCTTTAG CAACCTAATT GTATGGTAG ACAGATTCCT

SEQ ID NO:2320: (Length of Sequence = 348 Nucleotides)

GGAGTCTCT TGTCACGGA GAGCAGTGT GAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
 TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
 AGTCTGAGCT TGATGTCCAG CTCAACAACA GACACATGAT GATCCNAGGA GAAAACATGT CCAAAATCCT AAAAGCACGA
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTNATA GGGGGTACT ATGAAGTTAC TTCCTCAAC ATTAGTGCAA
 ACACAAAGTA NGAAGGTGGT GCCACACT

SEQ ID NO:2321: (Length of Sequence = 330 Nucleotides)

ATCTAGACTT TNAGTTCCCT GCATCTGCCA CGTAGTTTC TAGCAGGAGT AGTGGGGGA GTAATACAGA TTCINCCCTA
 GAAGGGGACA CTGGTAACAT GTCCCACTCT TGGATTAGCA GGGGTGGGTC CAGGAAGATG ATATTTCNCT CTTTGGCCCA
 CCCCCCTGGC ATTCACTGG ACCCAACTAG GCCATCATGA GTGGCTTCTC CCGTGTATCC CCAGGGGTCA TAGGATATCT
 ACACCGCCTT TNGACCCCA CCTGCACTC CCATCCCTTC CTCCTCCCC GGTTCATGCC CTGCACTACA TAGCACAGCC
 GGGATGCTTN

SEQ ID NO:2322: (Length of Sequence = 352 Nucleotides)

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SEQ ID NO:2310: (Length of Sequence = 359 Nucleotides)

CTGNGGGCTG CCTCTCGTTG GTCAAATCCA ACCAAAAGCT AAGAGCTGGA GAGCTTGGGT GGTGCATCCA AGGAGGCTTG
 CTTCTGGGG CACAGAAGGG AGAGTGGAGA AGGATGGAAA GTGGCTCTAG GGGAGGAAAT GGAGAACATC CAGAACTTTA
 TGTCACCTCT GGTGCTTGAA GGCTTTCTC CAGGGAGACA AAAAGTTTGT NTGGCTAAA GCTCCCCTGGT TGCTCAGGAG
 CCAAGGGTCA CATAATGTGC CAATGGGGGT TTTTGCCTCT GAAAGCCTCT GAGGTATAAT TACTTGCAAT GNNACATCC
 CTTTTCTCTC TCTTCTCTG CCCACCTTCC ATGCCAAGG

SEQ ID NO:2311: (Length of Sequence = 324 Nucleotides)

GTINGGGGCC GGCCTGGCA ACATAGACAC CATCTCTTTA AACAAACAAA CATCATTAGT TTCTACATTC TACAAGGTGA
 AAGACTAATT AGAAGTGAAA AATACCACTG AAATGTTGGT GTACAAATGG CAGCATAATT TGATTTACAC TAGATTTTAC
 ACATTTGTGT CTATTTCAAA TAGGTACTTT TACATTTTCC TTAAGTGCAT CTGACACAGA GTGAATCACA GATATATGTT
 GGTGTCGAAA GCAGAGGTTA CTATTATTAA NCGAAATTT TTGTGGTTTT GCAGTCATCA TATCTAATGT GGTTACAGAT
 TGTC

SEQ ID NO:2312: (Length of Sequence = 362 Nucleotides)

GNAATTTATA AAGCTTTATT AAACATTTCA AACAGCTGTG CAACGAACAC ACCAAATAAA AGCTCTAGAA TAGCAGTCCA
 GACGTTTCAC AAGTATGGCC TCACAGTCCC ATTCCCTAGA TGGACTGCCT CCAGTNCCTG NCTCTGCCCTG GCCCATCTCT
 CTTTCCCCTC AGGCAAGAGA GAGATGGATG GNTCAGACTG AAAGGACAGG CATGCTGATC TCCAGCAGGC AGGGGCCAGG
 AGAAAGTCTC GTTTGCCAAC ACTTGTTACT GAAGCGCAGA AAAAGCAGCA AGTGACAGTC ACAAAGTCTT CCTGGGGTAT
 TCTTCATAAC GTACAGTCTA TATGCGCAGG AACGAGGAAG CT

SEQ ID NO:2313: (Length of Sequence = 449 Nucleotides)

TGTAATTTTT AAATTAAGAC TGCCTTAGTG AGAAAATTT AGCAGGTGAG TTAAGGGCAC GAGGAAAGGG CCTTTGTGCA
 GAAGTAATGA CATAGGCAAA TTGTCAAAGG AGAGGTTCCC TGGTGTATTT NTAGAAGAAA GTAGACCCAT GTNTCTGAAC
 CCAGCACACA GTTCACTTAT GGTGGTTTGT AAATCTGCCC TGAATTTC ATGCATCTTT TAAATTTTTG GTTTATTTTT
 NCAAGAAATA AATGAAGTCT TTATTTTINC AATGAGGGCA ATGTTTATTA AGAACAGCAC ATAAGGTAGA AAAGAAGGTT
 GGTTTCTAAT CTGTGTTTAT CTTCCCCACT GATCTTGAGT TTTAAAGCA TAGAGAGCAC GATCCTTCTG TGGGGTCTCC
 ACTGTCAGAG AGCCTGTNCA GATGAGCAGT CACACTGTTA CTCCACAGC

SEQ ID NO:2314: (Length of Sequence = 316 Nucleotides)

CGAGGCAAAC ACAAAGGGCT CCTTCTGCTT CTCTGACCCC ACCTGCAGCA GGTAGTGGAT AACAGCCCTT ATGGCCTCCT
 TCATGACGCT CACGAGCTGC ACCTTCTGTG GCTCCTTAAG CAGTGACTGC TCACAGCGAG TGCAITCCTG GNTCCCCAAC
 TCCATGAGGG CATAGCAGGC GTTACCACA TCCTCTTTCA CCTCCGTGCC CGTNTCCTCC AGTGCCAGCC GCACCTCCAC
 GNACGNCAGA TTCACCAGCA GGGCCAGGAA CTGTCTCCCG GAGCTGCCCG CCGGGATCCA GTCCGAGCCG CAGGTG

SEQ ID NO:2315: (Length of Sequence = 286 Nucleotides)

ATTTTTATGT GTAGACAGGC TGTGGGTTC CCTCACTTAA ATTGAAGCTC TGTGAACTT GAGACACTTA AGANTCTTGC
 AAGTNTGAAA AGTGGAGTGA AACAAAACCA TTCTAAAAC GAAATGTGT AACINCNTTC AGTTTTACAC AGTGNAGAAA
 TAAGTATTAA ACAAGTTAGT CTCAAACGGT TATATCTTAA GGTCACTTTA TTCTGTAT CATTAACTAG ACATATCTTG
 GTTTAGAGAG CAGCACACAA GACATTGTGT ACTNTTTAAT AGCTAA

SEQ ID NO:2316: (Length of Sequence = 414 Nucleotides)

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TTCATGACGG AAGCCCCCA GGGGGGGTA CATGGTCANG GACCTGGATG ACGGTCTCA TGAGCAACAT GGGCAAGGGG
GCT

SEQ ID NO:2304: (Length of Sequence = 376 Nucleotides)

ATCTTGCTAT GTTGCCAGG CTGGTCTGA ACTCCTATTC TCAAGAGAGC CTCCTGCCTC AGCCTTGTAAG AGCACTGGGA
TTATAGGCAT GAACCACGC ACCCAGCCAA GATTGCCATT TTGTATGATG AGACTGGAAG GACCCCATG TTTCAGGATT
TTGCTACAAT ATACAAAAA CAATCTGTGA GACAGTGGCT GGGCTTTTTT CCTGCCTGAT TAGTTTCAGTG CACATACAAC
TTGGACCAGA GGATCTGGGT TTGAATCCCA TCTCTGATAC TTCCCAAACT GAGCTGTTTT CCTTATTTGT AAAGACTAAG
ATCGGCTATG TCAAAGAGCT CTGTAAACTC TCAACACATA CAAAGTACTA CTGCTG

SEQ ID NO:2305: (Length of Sequence = 354 Nucleotides)

CTGCCCAGCC TGCTCTGGC CCCCTGGAAG CCTCCCCACA GCTGGTAATC TGGACTTAAG GATTGCTGGG CCACCGCCTC
TCTGCCTACC ACCATTCCAT ATTTAAGTGG AGCCCTAAG TAGAAAGGCC CCGGGGCTTT ATTTTAGTCT CCTTTTCAGG
GATGTCTGG GGGGGGAGG GGGTTCTTGG TGCTACAGCC CTCTCCCCAC CCCTAAAGGG ACGCCGACGC TGTTCGTGC
CTTACCACA TATTAGTGCT TGACCCTGGC AGGGGACCCC ATGGAAAAGA TGGGAAGAG CAAAATACAT GGAGACGACG
CACCTTCAG GGATGCTCGC TTGGGATTCC CACG

SEQ ID NO:2306: (Length of Sequence = 345 Nucleotides)

CCAAGATCCT AAGTAATTC AAATGCCTTA GATATCAATG AAAGCTACAC ACCATTGAGA TGGGCAAAAT TCTTTCTCTA
CAAAGGGAGT AATCAAGTAA ATACCTGTCC TCTTTCAATG GACTGTGTC TATTGAGCAT TGIGGATGAT GIGTTTTCAG
ATTTCCAGGT GAAGTCTGA CCTACCTGT TTGGCCAAAG ACGTAAATG AGAGGAAAGG CCTTGGTCTT CCTGATCAAC
CAGCATTTAA CGAACAGTGG CTTAATGCAG ATCACTCAAG AGGNAGCATA GCAATGTAAA AGGAATATAA GTAGGTGTG
GATGCCTTTT TCCTAGACCA GGAAT

SEQ ID NO:2307: (Length of Sequence = 337 Nucleotides)

AACAGAATGT AAAAATACGC AAGTCAAAC CTGGTAGAAC TGCATGGAGA AACAAATGGA TTCAATATTA TNAGTCGGGA
AATTCAAGC CCTCCTATCG AAAATGGACA GATCCAGCAG GCAGAAAT AGTAAGGACA TTGTGAGCT CTGCAATACC
ATCAATCAAC TGGATATAAT GGACATCTAT AGACTACTTC AACACAGCA GAAGATACAT TCTTCTCAAG CTCACATGGA
ACATTCAAA AGATAGACCA CACGAGGCC CATAAGCAC ACCTTAACAA ATTTAAATA ATATAAATCA TACAGTGTC
TCTCAAACCC NCAGTGG

SEQ ID NO:2308: (Length of Sequence = 216 Nucleotides)

GAGGAGTAAA CTTTTTCTG AGAAGCATGC TTAGGTGTG GGACAGGAAG TGGTAAAGGC AATGCATGCT CCACAGAGGT
GGATGAAGCA GTNACAAAGG AATGATAATT TNANTGCTG GTGGCATCTN CACTGCTGGA GTGTATGGCA GCAATCATCT
TACTCTCCAT CATCTGGTG GGGGCGAGT GTGCAGGAAA GCCACAGGGA TTCGCA

SEQ ID NO:2309: (Length of Sequence = 289 Nucleotides)

GGGGCTATGA AAATACAAA AACATTAGCA CATTCTAGT ATGTATGTGT CTACAGGCAT TINCCAGCC CTATGAGAGT
NCTGCAATTT GAGAAGTACT AAAATGTATT GTTTGGTGAC AAGAACTGCA ATAAAAAGAT AAATGATTIN CTGAATGTG
TGGCAAAGCA GTCTATTTCC ACTGCAATTT CTGCTACTAT TAGCTTAAAA ATTGCTGAGA CAAAGGACAA CCTTCTGATT
ATNCTGCTGA GATCTAATGC AAAGTCCTCT CAGANGCTTC ACTACACAT

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CTGAGAAGAA AGAGTGTGTT GTAAAGGACA ATGACTTTGA GCCCAGAGCC CTGAAAGCTA ATGGAGAAGT TATCATTGAA
 ATTCCAACAA GAGCTTGTGA AGGACAAGAA AATGCTATCA AGTCCCTGGN GCATGTACAA TTTNAAGCAA CAATTGAATA
 TTCCCGAAGA GGAGACCTTC ATGTCACACT TACTTCTGCT GCTGGAAC TA GCACTGTGCT CTTGGCTGAA AGAGAACGGG
 ATACATCTCC TAATGGCTTT AAGAATTGGG ACTTCATNGT CTGTCACAC ATTGGGGAGA GAACCC

SEQ ID NO:2298: (Length of Sequence = 307 Nucleotides)

AGTACACCTA GTATCTTTAC AGTGAATTT AAGTATTTT GAACTCAAAG TATATATTCA TCTTAAACTC CTGGAACAT
 GAACCTCCC ATGTAATTIN CTGATGAATG AAAAGGAAAA CTTCTTTCA AATAAGTGTC ATCTGTTGCA AAAGTATGTG
 ATTTAAAAAC ACATGTAAAT ATAATCTTAG CTCTAATGTT TTCTTTGGG AGTTTGGGAA AAAGCAGTTA CATTCTCTG
 TTGCTGGTT TTTATCATTT GAAAATTGGA AGGATTCAAT CTGATTGCT GAGCTGCATC AGTAGGG

SEQ ID NO:2299: (Length of Sequence = 289)

GTTTTTAATG CATTITTTTT AAAGATTAAA GTAAAATGTC TCAATTGTAA AAAATACACA CCGGGCAAAT CCTTACCTGG
 NTAATAAATA TCTACATCAC AGTACAATAA AATTNCTNCT CTATAAAAT TAAATATGGA TTATAGTCTA TCACTATCAA
 AAGAAACACT ATGCTAATAT TTCCATATTA TTAAAATAAC AGGAAAAAT ACGNGCTTAT TTTAGAACCT GATGCCATAG
 CCGTTGGAAA GGGCAAAGAG ATTCAAATGT CGATCATCAC TCTCCATTT

SEQ ID NO:2300: (Length of Sequence = 371 Nucleotides)

CACCCATTGA AAAAGCAGCC GCCCTCCTTC CCAGGAGCTG CTGAAGAGAG AGCCTGCCAG AGCCTTGCCA GCAGGGACAG
 CCTCTTAGAT ACCAGCAGCG TCTCAGAACC CAACGCTGCC TTTGCTCNC ACTGTGCGGA CAGCAACAGT GGTGACATAG
 CTGTNATCGN GGAGGTCCGG ATGGAAGACC CAAAGGAGAG TAGCAGTTCC CTGAAGACTG GGAGGCACAG CTNAGGCCAA
 GACAAACCAC ACGNAACTTA CCGACTGCTG AAACGCAGGA NTCTGATCAT AGAAGCTGTC ACCAATCTTC GCTTAATCGA
 GAGTTTATTC ACGGTTGAGA AGATGATCAT GGATCAGGAG AAGCAGGAAG G

SEQ ID NO:2301: (Length of Sequence = 287 Nucleotides)

ACTTGGTGT GGGATTGTG GTGAGGTTG CTGACACCT GACCATTTT CACTGGCTGG AAATGAAAGG AACTTCCCAC
 TGTCTTTG AAGGCAATTC CATCTCTCC AGGGTCTTA TTTCTTCCC ATATCTCTC AACTTCCCA ACTTCTGAAG
 AAGGGAGCAA ACTTTGGCCA CGAGGAAGGA GTNGAGCTGC CTCTGTACTT GTCAGTGCAC CTGCACTGGT TGAATCCACC
 TTTCTGGGT CACGCCGCTG TGCTGGGTGG TCACAGCCTA GGACCCC

SEQ ID NO:2302: (Length of Sequence = 358 Nucleotides)

GGAACACAGG ATCCAACTT GTGGGGGAAC TCGGAGAGAA GATCATGTT GCGCGGTCC TTGGTGGGCC CAAGGATGAT
 GATGGGGCGA GCATAGTGCA CTTCATCTG CGTCACTGTC TCGTAGCTCA GAACCGAGTC TTCTCGACCC TCGATCCAG
 AGCTGGAGCC CCAGTCCCTG GCCTTTAACC TTGACCACTC TCGTGGCTCA ACCCGCGTT TGCTGGGGAT GAACCAATG
 TGCTGGTCT CACTGTGAGA GTGGACCCG CGTGNCTGCC ACCACTCTC ATCACTAGCA TCGATGACAT GCAGCACATN
 CCCAAGCGG AAGTTCAAGG GCCTGGCTCA GGAAGCCG

SEQ ID NO:2303: (Length of Sequence = 403 Nucleotides)

GTCAGGGCT CCAGATCATC CTCTCCAAG GGCCCGCAG GCGCTCTT GGCCTCTGG TCTGCTGC CGCTGGCCTC
 CAAGATGGTC ATGATGGAGT TAGGGATGTA AGCTTGTCTG TGGGGGTGA AGGAGCGGAC ATGGGCCAGC AGGGGCTCCC
 GGAGCTCTGG GCACTTNTCA AAGACGGCTC CCAGCTGCTG GGGCGGCANT GCAGGATGAC CTGGAAGCTC TGGGGCTTTG
 TCGCTGGCA GCACTTGATG AAGCCCTCCC ACACCTTGGG GTACTTCCAC AACTGCTTCA TGATGAGGCG GGACAGGATG

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COGACTCTAC TGAAATACA AAATTAGCGG GCGTGGTGA CGCATGCCTG TAATCCAGC TACTCGGGAG GCTGAGGCAG
 GAGAATTGCT TGAACCGGG AGGTGGAGGT TTGCAGTGAT CACACCACTG CACTCTAGCC TGGGTGACAA GAGCAAACT
 CTGTCTCAA AAAAATAA AAAAGNTAA ATGAGGTCAT GAGGGTGAGA CCTGATCCA AGCTCATAAG TGTCCTTAGA
 NGTGTCCTTA GAAGTGCTT TAGGACACTT CTTCCTAAGT NTCTAAGTT GGGGAGCTTG CTCTCCCAA

SEQ ID NO:2291: (Length of Sequence = 270 Nucleotides)

CAAGACAGGG TCTATTCTA TCTATTGCC AGGCTGGAGT GCAGTGGTGC AATCTGGCT CACTGCAGAC TCAACCTCCC
 AGGNTCAAGT GATGGAATC CCNCAGTTG TCTTTGACAT TAAGANGACA CCACATATAG ACGGCTGTTT GTCACTGATT
 GCCCAGGNAT TCATGGATGC ATTINCTCTC ACAGAGCAGC AACTAGGGAA GGAAGCACCA ACTAATAAGC TTCTCTATGC
 CAAGNTATC CCAACCTACA AAGAAGAAGT

SEQ ID NO:2292: (Length of Sequence = 332 Nucleotides)

CAGTGTCTT ATATTCTCCA CCTTCCCTTG GTTTCATTTC TCTTCGCTTC CTGAATGAGA AGTGCCCTGAG ATACCTTCAT
 TTCCTTGAA AGTATGATC CAAGTTTGA CAAATATCTC CCTCTTGTT GAGAGAATTC CTATATGTG AAAATACCAA
 GACATTCTTG ATATTAGCA GGCACCTCAA TATTGTCTC CTCTTTTGA GCATAATTAA GCCAGACTGA TGTTCGATT
 TGAGTATCAT CAGCATGAGT AACNTTTTA ATCTCTCTC CCTTAACCTAC TTGTCTTACA CTAGAGTCTA GGGTCAGGT
 ACGTACAGTG AT

SEQ ID NO:2293: (Length of Sequence = 255 Nucleotides)

GCACCTGACT TATGTGAGIN TCAGGCTTCA ATGCGTGTNT TAGAGCTACT CCTTCACACA AAATAGTTCA GAACATAGAG
 AAGGACCAAG GTTAATAAAT GATTTTATC CCAACACTA AACATGATTG ATGGGTAGAG GCTGCCCGAA GTACTGTGTA
 AAGATGGAAT CTGAGATAGA AGAATGCTGT GGTCAATTAG TAATTCTTGC CCATGGAGGG ATTAGTGACA CATGCCTTGT
 ATATTTGTCA TCTGT

SEQ ID NO:2294: (Length of Sequence = 236 Nucleotides)

GGCTTCAGAA GCTATTGGAA GATTCATATC AACTTACTAA TAATCAAGCA CTTTCATATT AAGACAATGT ATGATGTTTA
 GTAAAATTGA TTTTNCATA AAAGAAGTT AAAATAAAT AGCTATTCA AGAGNATCAT GGTTGTCAGC AAATAGAAAT
 GPTGTGCTTA ACTCAATCA CAGTAATATT CTGTGGTAGT CAATTGATTT CTTTGAGCCN TTATTCTTTC ATCTGT

SEQ ID NO:2295: (Length of Sequence = 308 Nucleotides)

TTTTAATTTA ATCAGTAACT TTATTATAAC AAAACCTGTA TATTACCCAT TTAACTCAT GTGTAACTT CAGTGATGTG
 AGCTGTATTA AACCCAGGTA TTAGTGAAAA TTGCAATTGT AAAACCTGGT AACAGTAGAC ATCTATGGGT GGTCAAGTAT
 TCAAGGACAC CTTTTATTTT AAACAATTTT ATATAATTCA TATCAATATG CAAAATTACC ATAAAAGATA CANGGATTAA
 TACATATTTA CATTTTGA AATAGTTACT CTGAGGTGA CAGCTGTCAC TTTTCTAAAT ATTTACAG

SEQ ID NO:2296: (Length of Sequence = 279 Nucleotides)

ACCCCTCCTG GAGGCTTCC CCTTCCCAG GCGTCCCTC AGGGCTACGG TGCCCCGCA CAGTTCAGTT TTGGCTACGG
 GCGTCCACT CCACCGCCAG ATCAGTTTGC CCTTCCGGG GTTCTCTCT CCACCAGCA CTCCCGGGC AGCACCTCTG
 GCTTCCAC CGCTCCGTC TCAGGCTGCC CCGGACATGA GCAAGCCCC GANAGCTCAG CCAGANTTCC CCTATGGTCA
 GTATGCAGGT TACGGGCAGG ACTTGAGTGG CTTCGGACA

SEQ ID NO:2297: (Length of Sequence = 306 Nucleotides)

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COGATGGTGA AGTGGTAAGA GGTCGATGGC CTGGGAGTTC ACITTTATTAT GAAGTAGAAA TTCTGAGNCA CGACAGCACC
TCCCAGNTTT ACACTGTAAA GTATAAAGAT GGAACAGAGC TTGANTTGAA AGAGAATGAT ATTAAGNCTT TAACTTCCTT
TAGGCAAAGG AAAGGTGGCT CAACITCCAG TTCCCTTCC AGACGCCGAG GGAGTCGATC AAGGTCAAGC TCCGATCCC
CCGGTCGACC ACCTAAAAGT GCCCGCCGAT CTGCTTCGTC TTTCCACCA GGGCGACATT AA

SEQ ID NO:2283: (Length of Sequence = 314 Nucleotides)

GAAAAAGTGG AAGTCATCAC CGGGGAGGAG GCGGAGAGCA ATGTGTTACA GATGCAGTGC AAGCTGTTTG TTTTGACAA
GACCTCACAG TCCTGGGTGG AGAGAGGCCG GGGGCTGCTC AGACTCAATG ACATGGCGTC CACCGATGAC GGCACACTAC
AGTCCCAGCT AGTGATGCGG ACCCAGGGGA GCCTGCGACT GATCCTCAAC ACCAAGCTGT GGGCCAGAT GCAGATCGAC
AAGGCCAGCG AGAAGGAGCA TTGCGATCAC AGCCATGGAC AACGAGGACC AGGGCGTGAA GGTCTTCCTG ATCT

SEQ ID NO:2284: (Length of Sequence = 262 Nucleotides)

GGCGTGACAC ACGCGCCCGG CCTGTGGAG CATTTTAAAA TCTGATTCCT TTCCCCCTGA AGTTTCGGT CAACCCCTNN
CTGTGGTCAG GTGATTNCT TTAATGCTA AAACAAGTCA AAATTCAATA TCCATGGCAG CTGACAATTC AGACTTTGGC
ATATAAAGTA AAGGGTTTAT TTTTCCATTC CTCTGTAAAT GGTTTGINT TCACTTATTT ATAGTGCTAT GAAGCTGGTC
ACCTGGGAGA ATGGCATAAC TG

SEQ ID NO:2285: (Length of Sequence = 193 Nucleotides)

GTGAGACACA GTCITGCTCT GCTGCCAGG CTGGAGGGCA GTGTCTCGAT CTTGACTCAC TGCAGCTGAT GCCCCCTGGG
TTCAAGCGNT TTTCCACCT CAGCTCCAA GCAGCTGGGA TTACAAACAT GNACCACCAC GGCTGGGTAA TTTTGTGTC
TTTAGTAGAG ACGGGGNTTT GCCANGTGG CCA

SEQ ID NO:2287: (Length of Sequence = 342 Nucleotides)

AGGCTGGAGT GCAGTGGCGC AATCTGGCT CGCTGCAAGA TCTGCCTCCC AGGTTACAC CATTCTCCG CCTCAGCCTC
CCAAGTGGCT GGGACCACAG GCACCCACCA CGCCTGGCTA ATTTTTTTTG TATTTTATAGT AGAGACGGGG TTTACCATG
TTAGCCAGGA TGGTCTCAAT CTCCTGACCT TGTGATCCG CGCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAN
CACTTGCGCC CGGCCTTCAC CTGTTAGTTT TTCAAGAGGT GTGTGTCATG TCCACTGTGA TAGTTATTT GTGTGTCAA
CTGACTGGGC CACGGGGTGC CC

SEQ ID NO:2288: (Length of Sequence = 343 Nucleotides)

TTTTTATTGT AATGAAATTT TAAAAGGCAG TTACATTAGT TACACATATA CACAACCGAC TTAATACTG TTAGTCATAG
AGAACATTCA AGAAATACAA ATGATTATC CACAGCACAG TTCACATCCA TAAGAAGAAA GAGAAATGGT TAAGTACTTA
AACTGTCCAC TGACACCTGC TTATGAAATC TTTTCTTTC TTTCTTTTT TAAAGGAAAC TGAGATTGTT AGATGAAGCA
AGCCGTCTG CTCCCGACA GCCTGTGAAA CTTCAATTT GCCACTTTCA AGGTCAGTGC CCCACAGACC CTGGGCTGTT
GTTGACCATA AACTAGCTT TGG

SEQ ID NO:2289: (Length of Sequence = 160 Nucleotides)

CGGGCCGCAA AGCTCAGCTC CTGGCGGTCC AGGCCCTGGT GGCTCTTGAT GATCAGGTCC ACGGCGGCTG CCACAGNCT
CTTAGGCC TTCAGCGCA NAGCGNCTCC AGCACCTGT TGTGTCCTAT GTCCGTNAAC TGCTGCACGA AGAAGCATAT

SEQ ID NO:2290: (Length of Sequence = 310 Nucleotides)

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TATTACACAA CTGTTGTAA ATTCTAGTAA GATAAATTGA TACTAAAGAA AACAAACCCA GAAAGATCAA GTGACTTGGN
 TCACACAACA CAGGNATTAA GANGGAAATT AGTATTCTTT GTTGGAAATAT TTTCCATTG AATAGTTACA GGAAATTTA
 TTGTCATATT TTACAAATTA AATGTGTATT GGACATCATA GTGGGGAAAT

SEQ ID NO:2276: (Length of Sequence = 349 Nucleotides)

TCCTCAGGTC CTGGAGGCAA CCGCAGAAAC AGAACANTGC AAATGCCAGC ATTTCCGCAG ATAAGCGTGG CCGCCAGCT
 GCAAACACCC CTGACATGCA GCGTCTGTT TAAATCTGG TTGCCCGCTG CAGCCAGTGG AGCTCAGAGG GCTGCCTGGC
 GGGTAAGGAC TCCAGGCACA CAGCAACAAG TGGCTGCCAC CTCAATCCC ACGTGGAAATA TGATGGGGTC CGAGCCAGCC
 AGTAACTCCA NGAGGCGTGT AGTGTGTAAAG TTCGGCCAGA GTTINCAGAT ATAATANCA TGGCCCCACG ACGTAGACCT
 GTGGCGGCTC AGGGTTAAGA GACGGGAGC

SEQ ID NO:2277: (Length of Sequence = 182 Nucleotides)

CTTATATAG ACTCTGGTTC TAGAACTCG CCTGCAGCCG CTGGCTGGAC CAGCACACGC TGACGGGGCC GGACTATTTA
 CAGGCCCAT TGGGGCTGTA CCTTGGCCAC CTNCGGCAC GGTGCTCAGC TGTGACENCA AAATAAGTTA GGGCCGGCCG
 GCGGGGGCGG GCGGGGACG GG

SEQ ID NO:2278: (Length of Sequence = 276 Nucleotides)

GTATTATTTT CCCCAAATGA AGCAAAGCAA GTACTGGGGC GGAGTCATCA GAAATACCTT GGGAGGTGGT GGGGAGGGGA
 GTGGGAGCA TCAGGAAAAA CCCATCTCAA CTCAGCCTC TCAGGGGTG CGACTGGAAA NTCITGCGTT TTCCATCACT
 GGTGCAGAAA GAACCTCCCC AGGAATGGCC AGTGGCCTTT CCGCGTAAC AAGGNCGCAC GCTCAGAGCA GTCTTCTCTC
 TGGGCTGGGT GGACGGGAG GCGGAAGGA AAGCCT

SEQ ID NO:2279: (Length of Sequence = 193 Nucleotides)

TGCACCATG GCCCCCTCA GAGCCCCAGG GCCCCTGAGC AAGCAGGCT CTGGCAGCAG CCAGCCCATG GAGGTGCAGG
 AAGGCTATGG CTTTGGG : GGAGATGATC CTTACTCAAG TGCAGAGCCC CATGTGTGAG GTGTGAAACG GTCCCGCTCA
 GGTGAGGGCG AGGTGA : CCTATGCGC AAG

SEQ ID NO:2280: (Length of Sequence = 401 Nucleotides)

GTGATTTTCC TGTCTCCGTC TCCTGAGTAG CTGGGATTAC AGGTGCCAAC CACCACGCC AGCTAATTTT TGTAGTTTTA
 GTGGAGACGG TTTGCCCATG TTGGCCAGGC TGGTCTGAA CTCCTGACCT CAGGTGATCC ATTCCCTCG GTCTCCCAA
 GTGCTGGAAT TACAGGCATG ACCCATTGCG CCGGCCCCA CTGTTTCTT TCTAATCGAG TGAGAAAATG GTCAATTTT
 CTGTCAACAA AATTCAATGAG GCTCTTTGTA CGCACAGGAC TTCAGGCTT TCTCTCAACA ATCGCCAAAG CTGGAGGCAT
 CCACAATGGA GNAACAAC TGGGGTTTTG AAAAAACAGG GAATGTTCC AGAATTNTTC TTCAAGAGTA TTACATTTT
 T

SEQ ID NO:2281: (Length of Sequence = 217 Nucleotides)

AGCAGGGGA TTGTCCAAGG GTCTCCGGC GCCCAGGGCA GTGGTGGTGG CAGCACGAGT GCCACTATG CAGTCAACAG
 CCAGTTCACN ATGGGGCGCC CGGCATCTC CATGGCGTGG CCGATGTCCA TCCGACCAA CACCATGCAC TACGGGAGCT
 AGGGGCCCGN CCCGCGNAAC TNACAGCACC AGGAAACCAA ATGNATGTCC CTGCCCG

SEQ ID NO:2282: (Length of Sequence = 302 Nucleotides)

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CTTCTCTCTC CTGTTACAC AGTATTTCGAT TATTTCATG GCTACTTTCA GAGGATCAGC TAGAGGCTGA TGTGTTGTTT
CAATGGTTAT ATTATTTATG AACTGAGAGT AGAAGAAAAA TTTGAGAGCA GGTTTTTGA AAAAATGAAT TTAGACAAAT
ATTTAGTAAC TGTATGATAT ATAACCCCC N

SEQ ID NO:2269: (Length of Sequence = 237 Nucleotides)

TAGAAGCATT TTTTAAACAA CACTCAACTT TGTGAACCCC TGAAGATTTT TTGACCGTTC CAAGTCTTAA TGCCACACCA
CTATTCCAGC GAATTTATGC TACAACCTGGT AACAAATGACC AGAAGCCTGA AGAATTAAAA TGCCAACACC AAACCTTTCC
NTACCAGCTC TGGNCTATAT TGCTCCCATG CATTTAATAT ATTATNNGT TTTATANCCA CTCTAAATA TTCTCAG

SEQ ID NO:2270: (Length of Sequence = 223 Nucleotides)

AAAGGTTAAG GAATTCCTT TATTTTTTAC AAATTAAGAC TATGCAGATT TCATATATTT CTGAATCAAA AACACCTTTG
TCTTCACAGT ATGAGTTAGA ATGCAGCCTG AGCTGAAAAT CAAGAACTA GAAAAGAAAG TGGTAGAGAT AACTATATTA
AAAACTGTT AGGTATTTCC TTTAAAAGTA GGTGTTTTTT TTTTTTNCC NCTTTTTTT TTT

SEQ ID NO:2271: (Length of Sequence = 363 Nucleotides)

TTTGATGGGT GAGGCTGGTA GAGCCACTGG GAGAATGTGG GGCAGTGAGG GGAGGGACAT CTTCTAGCA TCACCAGCAT
CCTGAGCTTT GTCTGTGTT GGGAGTCCA CAAGGGCTGG TGCAAGNTT AGCAGCTGCT ACTGAACCC TAATCCCTGG
GTGGATGTGG TCTCTGTAA CTTAAGAGCA AATGTTTGIN ATGACATGCA CGGGTGGGCA GAGGTGAAA AGAACAGGGG
TCTACGGAGG AGCCAGGCCA GCCACGTGAG ACCCTTCTTT CTAAGTTGGC TTCTTGCCA TTCTGGGGA TTNGGGGAAA
GAACGACAGA ACTTACCTTC CATCTTCCTT CTCACAAGCA GTG

SEQ ID NO:2272: (Length of Sequence = 150 Nucleotides)

CTCCCCCTGT AATCCAGCG CTTGGGAGG CCGAGGCGGG GGGATCACGA GGTCAAGAGA TCGAGACCAT CCTGGCCAAC
ATGGTGAAAC CCCGTCTCTA ATAAAAATAC AAAAATTAGC CGGGCATGGT GACGTGCACC TGTAGTCCCT

SEQ ID NO:2273: (Length of Sequence = 330 Nucleotides)

TATATTATGT TAATAAATC ATGTATAAGC AAAAGACCTA TGAAAGTATA AAACAGACCA ATGGATTTTA GTATAAAGT
ACAAACGTT CATTGAGGTG GGTCAGTTT TCCACAAAA ACTAACCTTT AAGAACTAC CACTTATCAA GTTTTGGTAT
AAGGTATAAT ATGAAAGANG AAAATCCATA ATTATTTGAA AAACACGNTT TAAATACCTT CCTTTTTTCC TACTACATAT
CTCTATTAGG CTGGGTTTC TTCACAATA ATTGAATACA AAAACAAATA TGAGNATTTA GCTGTAATCT ATTAATCCCG
ACATTACAGG

SEQ ID NO:2274: (Length of Sequence = 372 Nucleotides)

AAAAAGCCAG TTGCAGTGGT ATATGCCAT TGTCCAGCT AATCAGGAGG CTGAGATGGG AGGATAGCTT GAGCCCAAGA
GTTTGCGACT GGGCCTGGGC AACATAGCAA GACCCTATCT CTAAATCAAT CAATCAATCA AACAGTGGTA TGCCACCCAG
AATAAGTATC TTTTTGAAG TAAAAACAA AAAGCGAAT GGAACAACA GGTCTGGTAG TGGTGGCTGT CTGTACTGA
CAATGAGGTC TCTGCAGAGC CGTCCCTAC CCTNCCCAAC CCCCTAGACA TCAGGTCCCT TTCTAGGAA AATGAGAGCA
CAGACCTAGG NCCATGGNCT CCCAACTTT TTCTTCTCTT CACTACAGAT TC

SEQ ID NO:2275: (Length of Sequence = 370 Nucleotides)

CTTATTCTTT TCCTGAGGAT GTTGGTTTAT TATGGATTGT CTTAAGCAT CACTTGGAAA CGCTACAAAT AATGCAGCTA
AATGTTAAG CAATTAGGAA ATAGGAATTT TTAAATACAG AATTTTGCAC TGCAGAGTGT TTACAAGTAT TAAAAGATTG

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CTGTCAAAAA TGTATTATAT CAATAATTTT ATCAGCAGCA TTTAAGAAAT AAGAAATCAT TAGACAATAG AAGACAAACA
 TGGTAATGCA GTCAGGCCAG CACACAATAC ACGTTTTTCA TCACACACTG TAACCTGAAT CCTGGGCAAT TTCCTAGAGG
 TATTAACATC ATACCTTATT AAGAATTATT GGGCCCNAGG AGTNGGGGGG TGGGGGGGTT GCAATCTGTC CAATCAACAT
 CTGGCTCTTA CTTTCTCCCN GTAGTATTAC ATTGTATATA TATTCCTATA GGAAACAACCT CAACTCCATG TTTATAAAG
 CACCATACGG TTTTCCATC CTGTACCA

SEQ ID NO:2263: (Length of Sequence = 352 Nucleotides)

CCCCAAAGT TGACATGGTC AATGAAGAAA TAGGCAACA GCAAAAGTT GCAGTCATAC ACCAAATGAA AGAAGATCAA
 AGCAAAATCC CTGAAGGAAT CCAAGTTGAC TCTGACGGGC TAATCACCAT AACAACCTCC ATTAACCTTG CCAAGCTCAG
 TGTTCGAGCC ATGCCCTTC CAGAAGAAGT CACCCAGNTT CTGGAAGAAA ATAGTGANIT GATTCGTTCT ATGGAGCAGT
 TGACATCCTC TTTGAATNAG GGTGAAAATA CTCACATGAT TCATCAGAAG ACCCINNGGA AAATTTNGGA ATTCAAAGGA
 AACTTTNAG CAACANCTAA CAGGGNGNTG AT

SEQ ID NO:2264: (Length of Sequence = 381 Nucleotides)

GCTTACAGTC TAGAACAAGC TTTTCAGCC CACAGCCCAG GATGGCTTTG AATGTGGCCC AACACAAATT CATAACTTT
 CCTAAAACAT TATGAGATCT TTTGTGATT TGTGTTTTAG TTCATCAGCT ATCATTAGTG TTAGTGTATT TTGTGTGTGG
 CCCAAGATAA TTCTTCCAAT GTGGCCAGG GAAGCAAAAA GATTGGACAC CCTGGTCTA GAAGGAAAGG CAAATATTAA
 ATAACCTCAG AAAGTGATAT TACAAATGT GGTGAGTTAT AAACACACTA TCAGGTGTTA TAAAGGAAGT GAAGGAAGTG
 GTGAGGAAAT TCTTATCAGG GNAGTGATAT TTNANTGAAG GGCCTTAGGG GATGAGTAGG G

SEQ ID NO:2265: (Length of Sequence = 301 Nucleotides)

CACCTCTCCT CCATCTGCC TTTCCACAGC AGTCAGTCTG GTCCAGCCA CCATCATCTG TCACCAGAC TACCATAGCC
 ATCTCCTAAC TGGTCTCCCT ACTTGCCGTC TTTATCTGTC ACACAGCAGC CTGAGTTTAT ACACACAGT GCATTCATTC
 ATATTTTGCT TAAACTGTT CAATGGCTTC CCATGGAAT TGGGAGTCTG GATATCTTCA CAAGTGTGTN GCATGGCCCA
 GGACCAATCT GGACACCCCT NCTGTGTTGT NCATNCATGC CTGCAACCAC TTTTGGCCT T

SEQ ID NO:2266: (Length of Sequence = 360 Nucleotides)

CGCTGCAATG CCCACAACA ACACAACTTT ATTCTCTCC CAAACATCTG TCAGGCCTGG CCTTCTGAG CAGGAGCTGA
 GCAGGAACAG GGCCTGGCTG CCTCTCTCT GCCACAGCTC TGACCTGGG AAGGCTGGAA GCTGGCATCG TAATGGATGG
 GGGAGTGGT GGAGGATCTG AGGCTCCCT GGGTAGGTTT CGATACCTTG GACAGGTGGG CCTCATCTG ACTTAGAACT
 CGGGGAGGGG CCATCTTCC TTTCCCTTCT TCAGCAGCA GCTCCACCAC CCTCCACCTT CTGTCTCGA CATGTGTC
 AGAAAAACCA GCCATGAGG ACCGCTNTGA GGAAGGGTCT

SEQ ID NO:2267: (Length of Sequence = 391 Nucleotides)

GATGGAGTCT CGCTCTGCA CCCAGGCTGG AGTGCACTGG CAAAATCTCG GCTCCGGACC CCCCAGAC ACATATGACC
 CACCACCCA TCTCTGACCA TGAGGCCACC CTGAGGTGCT GGGCCCTGG CTCTTACCT GCGGAGATCA CACTGACCTG
 GCAGCGGAT GGGGAGGACC AGACCCAGGA CACGGAGCTC GTGGAGACCA GGCTGCAGG GGATGGAACC TTCCAGAGT
 GGGCGGCTGT GGTGGTGCT TCTGGAGAGG AGCAGAGATA CACCTGCCAT GTGCAGCATG AGGGTCTNCC CAAGNCCCTC
 ACCCTGAGAA TGGGAGCTG TCTTCCAGC CCACATTC CCATGTGGG CATNATTGCT GGNCTGGTTC T

SEQ ID NO:2268: (Length of Sequence = 191 Nucleotides)

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TTTTTTTTTT TAACTGTAAA TGCTATTTTA TTTTAAACAT TTTTGTITAC AAAAAAAAAA AAAATCAATG ATTGGTACCT
TTTTTACACT CTCAGATTCC TGAATATGGA CAGATCTTCA AAGGGAGGAA GGAGTCTCA TATGAAATTT AAGATAGACT
GTCTGAAGG TTGTGGGGTG GGGTTTTTIG TTGTGTTTTA ATTGCTTTT GTTTTAAAGN CACAATAAAG CTAAATATGC
AAGTCTCTGG GAGAGATCCC CTAAAGTTT CAGTCAAGGA GCATATCAGA GCACAGACAA GGNAGCCCCA GCCTGGTGCC
CGCCGGCCCG TCCCGGCTGC CCAGNGTAT TTGGTAGCGC ATGGGTTGAG A

SEQ ID NO:2257: (Length of Sequence = 372 Nucleotides)

AACTCTATGG CACTAATGTA TGATGGATTC ATTTCCAGAC TGTCGGCCAC GGAAGCACTT CTTCATGGCC TCTGCCCTGG
ACAGCAGCCT GTCTCCGGG CTCCCATGT TTTTACCAGC TTCTGCTGAG TTCTTACAAT CTTGAGCTCT GCTGAGAATT
CTTTTCTCTG AAATTTCTCT ACCTAAAGCC CCAGCCCCCA AAAGAGCATG TCTCAGGAAC TCATTATGCC CTGAGTCAAC
AAGAACTTGT TGATAAATGG CTTAAAGTT TTTACAAGAA GTAACCTCCC TTGTAAGGA GTAAATAATA GCTCTGGGAA
TTTTCCAGAT AAACTATTT CATTTCTCTG GTCAGTGGCC CCATGGGGAG AG

SEQ ID NO:2258: (Length of Sequence = 340 Nucleotides)

CTCAGCCTCC TGAGAACCTG GGATTCAGC CTCCCGAGAA CCTGGGATTG CAGGCACCTG CTGCCATGCC CAGCGAAGAT
TTGTATTTT TAGTGGAGAC GGGGTTTCAC CATGTTGGCC AGCGGGTCT CAAACTCCTG ACCTCGTGAT CCACCCGCT
TGGCCCCCA AAGTGTCTGG ATTACAGGGG TGAGACACCA CGCTGGGCT TTATATATAT TTINAGAGAG GGGGTCTCAT
TTINTTGCC AGGCTGGTCT TGAACCTCTG GGCTCAAGCA ATCTTCCCGC CTCAGNCTCT CAAAGTCTG GGGATTACAG
GCAATGAGCC NACCGTGNCC

SEQ ID NO:2259: (Length of Sequence = 394 Nucleotides)

CCCCCAGAT CCCACTGTA GGAGAAGCC TCTGCTAACA TTTTCTCTAT CTGTATATCC TCTGGGAATG AGACCCACTA
AAGGGCTAGA GTGTGCTCA GTGTGAATTC CTCTTTCTCG ACTCCATCTT CGCGGTAGCT GGGACCGCG TTCACTGCC
AATATGCAGC TCTTTGTCCG CGCCAGGAG CTACACACCT TCGAGGTGAC CGGCCAGGAA ACGGTGCGCC AGATCAAGGC
TCATGTAGCC TCACTGGAGG GCATGCCCC GGAAGATCAA GTCTGTCTCC TGGCAGGCGC GNCCTGGGA GGATGAGGCC
ACTCTNGGCC AGTNGGGGT GGAGGCCCT ACTACCTGG AAGTAGCAAG GCGCATGCT TTAGAGGTAA AGTC

SEQ ID NO:2260: (Length of Sequence = 359 Nucleotides)

TTTTTTTTTG AGATCTGAGA TTCTTTAAT CAGAAGCAG TGCGTCCAC AGTGTGCTCT TCAAGCCCCA AAGGGCAGC
CTCTAGGACT GCTCTCTAG AGCGAGGCTC GGGCTCTTG TAAAAAGCA TTTGCTTGAT TTTATTTAA CAATGGTGAA
TCTTCAAGGT GCCAGTCTAC ATGCCAACA GTCTCCAGG NTTCAGGNC ACAGTCACCG TCACTCAGAG ACTGCCTCAT
TTNGCAAGAG AGAAAAACAG TGACCACCAC AGAGGCGAGG GAGTGACAAA GCTTGTAGGC TAATGCTGCA AAAGCCGCTA
GAAACTGGGG GCCACACACA AGNGCCANC AGGTGCGCC

SEQ ID NO:2261: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT GAGACAGAGT CTGCTCTGT CGCCAGGTG GAATGCAGTG GTGTGATCTC AGCTCACTGC AACCTCCGCC
TCCCGGGTCC AAGCAATTCC TCTGCCTCAG CCTCCTGAGT TGCTGGGACC ACAGGCGCAC GCACCAGCC AGGCTAATTT
TTGTATTTT AGTAGAGACG GGGTGTACC ATATTGGCCA GGCTGTCTC TTCGAAATCT TAAATCCAA CATTTCTATT
CTCTAGATC CCTGTCTCAG GCGAATCCTT TCATCTTCC CTTATAGCTC ATCAGCATGT AAGTGTCTG ACATCTCTCT
TCTCCTTCCC TATTAGCTCT CTACTCTCIN CANTTACAG

SEQ ID NO:2262: (Length of Sequence = 348 Nucleotides)

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SEQ ID NO:2250: (Length of Sequence = 275 Nucleotides)

TGCCAAATAT ATATATCTGA ACATAGTGAA AAAGTAACAT TTAAATCAG TCAAATTATT TTAAAAATTC CTTTGCTTAA
TAGCCATTAC TTACTACCT TTTGTTTTTG TTTTNCCTT CAACTACTAG AGTACTGTAC TTTTGCTTTC ATTCCCTTCTA
TACATTCTGC CTTTCATCCTT AAATTGTTCA ACTCGATAGT GCTAATATTG GTAGATAATC TACGCTAGCT GCTGTTTCTT
GTACAGAAGT TGGTTGATAT CGCTGATTCA CTTTT

SEQ ID NO:2251: (Length of Sequence = 426 Nucleotides)

GGAATAAGGA GATGAGAGCA TGCTCTGCCA ACTGGCTGGG ACCTGAATGT GCTAGGCAAG TNCCTACTACA TCAGCTCAAG
AACATAAACA AAAATGTAAAT TTAAAAACA GATGGTTTAA AAAAAATCTT GATAAAAATT ACCTATCCCT CTCCCTTGCT
GTGAAATAAT TTAAATAATT TATTCTAGAT GTAAAAATAA TAATACAAA AAGTTTGTTT AAAGACACCT GTGTCTGTGT
TGTTAAGTGT GCAGTCTGGG TCCCTTGGGG TGGAGGGAGC TGGCCAAGGA ATGGCATTGT GCAGAGGCAT ACCGGGAAGC
TCTCTGGATG CAACCCACC TCTACCGCTT GGCAGTCAAT GACCTTGGGC ATGATGTTTC TTCACTTCTC TGAGGGCTAG
GGCTTTGATT CTGAACATGG GGGGCT

SEQ ID NO:2252: (Length of Sequence = 315 Nucleotides)

GAAAAGATAA ACAAAATTAA TAGACCATTG GTGAGATTAA CCAAGACAAC AGGAAAGAAG ATCTTAATAA GCTCAATTAG
CAATGAAATG NGAGCTACTA CAACTGATAC CACAGAAATA CAAAAGATCA TTCAAGGCTA CTATGAACAC CTTACAGTGC
ACAACTAGA AAACATAGAG GAGATGGATA AATTCTGGGA ATTTTAAGAN TAATACAATG GACTTTGGGG AATCAGGAGA
AAGGTAAGA GTGGGGTGAG GGATAAAGA CTACACATTG CATACAGTGT ACACTTCTTG GGTGATGGGT GCGCC

SEQ ID NO:2253: (Length of Sequence = 335 Nucleotides)

AGATTATTTC TCATGTACAA AGCGGTACG CCACGGGACC ATATACGACA GTTGACAGAG GTCCTAGAAA AACGCATCTN
TCTAAAGGCA ACTCAGAAAG GTAAGGCAGG TGGACCCCTT CCCCCACCCC ACAACGCACA CAGAAATGAA CGGAGAAAAA
GAGAGAAGCC AGTGGCCGGG CTGACCCAAG AGTCCCGGCC CTATGGGGTC TCCCAAGCCC CAGGGCACAG GTGGATATGG
CCTTGAAGAG AGAGCCCTGC CAGGGCTNAG GCCAGGTCTC TCACTGGCTG CAGGAATNGG TAAGGGGCTC AGGCCAAGGG
GAACACTTCA GGGG

SEQ ID NO:2254: (Length of Sequence = 380 Nucleotides)

GGAAGGCTCT GGAGAGGTTT CTGCAGGATT ACTTTGATGG CAATCTGAAG AGATACCTGA AGTCTGAACC TATCCCAGAG
AGCAATGATG GGCCTGTGAA GGTAGTGGTA GCAGAGAATT TTGATAAATA ATATACAATA ATCACAATCA CTTTCCACCA
CCTACACAAA AAACATTTCA TACAGACTGC AGTACAGTGA TTTTTTTTTA TGAACATAAA GGTCAAAATT GTTTCATTTT
CTCTTCTGCA GATTCTAAGT AAAAAATGAC AAAATATGCA TAGAGATGTT TGTAACCAA AAATAAATGT CTAGGGCCCC
GAACCATCTT GAATGGGACC CCTCCTCTCA GCCAAGGGCA TTCCAAAATT AACCTGCAAA

SEQ ID NO:2255: (Length of Sequence = 399 Nucleotides)

ATATAAAAAG TGTTTCTGTG ATTCTNCAGA GCCCAGGAGT CAGTCTGGT GGTGGAGGG ACCTGCCCCC ACTGGTTCAT
TTAACCTCTT GTCTCGGTGC CCTCAGAACC TCAGCCAGAA AGGCAAGGAG GAAATCAGAG CAGGAGCCTC ATACTCTTGG
TGATCTATTG ATTCTGTGAC CTCAGGGGTC ACATATAAGG TCAGTGTTC TCGTCCCCGC CGGATCTGCA CTGCCAACTG
GGATTGGGTT CGAACAGCTT CATAAACATC TTCAGCATTT TGTACCATCT GCTCCCAAT GGCCAAATC ACATCACCAG
GNGCAGACC CAGCCCGGTG TGCAGGGGAG CCCAGGATGA CTTTATGGGA TGAGTACANC ATGCTGAACA TCGGGNAAG

SEQ ID NO:2256: (Length of Sequence = 371 Nucleotides)

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ATATGTACTA CATTGGTGG AATACGCATG TACAATTCTT CAAAAATAGT AAAGAGCAAA ACAAACAAAA AATAGTAGAA
GCACTGGAGA AATACACTAT GGCATAAAT AGTTACGGGT GGGATGTCAC ATGGACCATA TCTACACTCT GTGGCAACCT
TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT
CCTAAGCAIT TTATTTTAGC TCAAAATATA AAATATTCAT CAGTTAGCCA AGCTTTGGGA TGAGAGATCA TAGCCTCCTC
TTTGATAGGN GTTCTTGTT TTCTTGATT CATGTTTCAG AG

SEQ ID NO:2245: (Length of Sequence = 333 Nucleotides)

AAGGATCTGA GCGAGTTCAG TGTCATTGTG GGCAACGGGG AGATTAAAGCT GCCAGTGGAG ATCAGTGGGG CCATOGAGGA
GGAGTTCACT GTGGCCCGAC TCTACATCAG CAAAAATCAA TCAGAAGTCA AGTCTGTGGT CAAGCGGTGC CGGCAGCTGG
AGAACCTCCA GGTGGAGTNT CACCGCAAGA TGGAAAGTAC CGGGCGGGAG CTCTCATCCT NCCAGCTCCT CATCTCTCAG
CATGAGGCCA AGATCCGCTC GCTTACGGAA TACATGCAGA GCGTGGAGCT AAAGAAGCGG CACCTGGAAG AGTCTATGA
CTCCTTGAGC GAT

SEQ ID NO:2246: (Length of Sequence = 347 Nucleotides)

AACTAGCTT TGGTGGGAAC TCCCTACCC CTGCTCCCCA CAGGAAGGCA TTAATCTATT TATGAGGGAT CTACCTGCTA
TAACCCAAAC ACCCCACCAG CCCCATCTC CCAACACCAC CACACTGGGG ATTAAATTTC AATGTGGGAT TTGGAGAGGA
CAAATATCCA AACCATAGCA GTCTTAAAGT ATTTAAATTA GAATTTAAAT TAAATTTAA ATTACAGTAT TTAAATTAGA
ATCATTGTG GAGTTTCTAA AAGGTATGCA TTCCTAGGCC CCTCTCAAGT TAGATTTATG GACACTGATC CCCAGTCTGG
AATTTTAAAA CAGCAAAATC TCATACT

SEQ ID NO:2247: (Length of Sequence = 357 Nucleotides)

CACAGGACAT GCTCCGTCAG CACAAGCACT CCAAGTCAA TCTGAAAAGC AGGCAGCAGC ATTGCAGGGG ACAGGTCCTC
CCCTGATCTG GGTGGTGGTC TTCTCCCACT TAAAGCACTA TATACAGGGG GAGGTCCAG GCTGGACATC TTTACCAGGG
GCTGGGAGAA AGCAGGCGGT GCTCTGTGGT CTCAGAGTCT TCCTGGGCT CTTTGGAAAC TGACAGAACA TGACCTCAGT
CCCAGCCAGC GAGTGGCAGA GAGGACTTTG TACTTGGCTG CAATAAAACA TGCCCTTCTT CGCAGAGACA CGAACATCT
CGTCTCTACC AGAGGCCTGT GAGACATCAG CTCAGGA

SEQ ID NO:2248: (Length of Sequence = 327 Nucleotides)

TTCTCTTAT TAATGGCTAG AAAGTCAGGT TCACCCAGG AAGTCACTGA GGGGCCACAG CATTGAAGGG TATGGGGTTT
GGAGAGATAG GAGCAGGACC CACCACTCAC GTCCAGAACC CAGGGGGCAC ACCTGGTCCA AGAGGTGGAG GCATTGGTCA
CTGGAGTCAC GAGGGTCAGG ACAGGCACTG AGAGGCTGAG GGAGTNTGG TCCGGAGGGA GGCAGTCACG GGCTAGGGCT
GGGAGTCGTA GCCAGTNTGC AGGGCCTGGG AGCCCCAGG CTGATGCCCT GGGCTGGCGT AGTACTCCAC CACCTGCCGT
GGCACCT

SEQ ID NO:2249: (Length of Sequence = 404 Nucleotides)

ATTTTAAATT TAGGTTTGT TTATTTAAGT TTAATGTTAA TTCCATGCTG TGTTTCAGTA AGACAATAC AGATTCTGTA
TCTGTGGCTC CAGTCAGATA TCCAGTAGTA CAAATTAGCT TCAAGTTACA CATACTGAAC AAAAGAGGTT GAGCGAGCGA
AGGAGGGGAG GAGTGAGGGG AAGGAGGTAG GGGGAGGGG AAGGAGAAGA AACAAAAGNN TTGAACAGGC ATGCAGGCTT
TTCCATACCA CCTTCAACGC TAACCTGCTT CAGTGGGAGA GTAAAGTAGG CAAGANTGAG CAGCCACGGG ATTGTTGAAC
TGTTACCCAG CACCATGCTT TTCAGCAACA TTTTCAGCG AGTTTGGGAA CATTTTITTA CCAGCAAAAA CCATTACACC
GAGT

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ATTTAAGGCT GTACTTAACT AATTTGGGCT GAGGATGAAT ATATCAGCCA CAGCACATTA AAGAATGAGC CAAGGATTTG
 TCATGGTTGG TCACTTTTAA AAGTATTTGA TTACTGCAAC TGGAGAATGA AAAGTGTATA TTGGTGACGC CAACCTCAGT
 TTCTGAGCAC TCCTGCTCTG TGGTGAGAAT CAGACAAAAA TTCATCGGGG TGAATAAAAA AAGGCATTAC CTGATTACCA
 CCTTGTCTT GCTAGCCCTC TTCCATTCAT TTCTCACACA GCATTTGCT CTGTAAATC CTCTCTCTGT CTCAGACCAT
 TGCTTGCCCC TTCAAAGGGT ATGGTTCAGG CTCCTTTCAA GACATTTGG

SEQ ID NO:2239: (Length of Sequence = 399 Nucleotides)

TTAATATAAT ATTCAAGTCT AGCATTGCT ATTTACAACA AATAAATATT GGGCTCCCC AATCAGTAAA CAAACATTTT
 TTTTCTCTT TTGCTTTTAA TACAAATATT CAATCACCCC ACCCCCCACC CAAATCCTCC TTCTCACTA ACCCCGCTC
 TGCATGGTCT CGTAAAGCCC AGGACGCAGT GGTAATGGC ACTTGCACTG GCATGAGATT CAACATOGAT GGGACTCAGC
 TGGGACTGTC CTCACTCACC GGGTGCAGAG TCTGGTCCAT GAAGAGGGNT TCTNTCTCTG CTCCCAGGGG AGGCTGGGG
 TAAGCGGTGG GTGAGACTCC CTCACTCTCA GTTGCNCTG ATGATGGAAT CTCTNGTGCA GCCTGAGAAA GGCTAGAGT

SEQ ID NO:2240: (Length of Sequence = 388 Nucleotides)

TTTTCAGAAT TCATCTCTGA CTTAATGGC TTAAGCAAGA ACATGGTTTC CGTGGCTCCC CCTGGACTGA ATGCTGGAGG
 ATATATACTT CACAGTCTGA GGCTGGTCC CAGGAAGTGC AATCTAACAG GATGGCAAGT GGTTTTGAAA CATATAGATT
 TTCAGGATGG AAGTTTGATT CTTCAAGTGG TGACTCATCC GTGGAAAATA AATGGTTTAG CACCTAAATC TGTATATTCC
 CATCAGTGGC TTGGCTGACT CAGTTGTAAA TAGGGTACCC TCCATCTGTC TCCCACCCAT ATGCTCCACT GTCCCCAGGG
 CCTCAGTGCC TGANCCCTAG GGGGATTGGA GTTGGCTGCT GGATTCAATT CCTGCAAGCA GGCTGCA

SEQ ID NO:2241: (Length of Sequence = 377 Nucleotides)

CTCCATTTTG TCCTAGTTAC TTTAAGGTA TAAGCTGAAG TCATTGATTT GAGATGTTTC TNCCTTTCTA ATATAGGTGT
 TTAATGGTAC ATATTCTCC CTAAGTACTG CTTAGTGGC ATCCTGCAAA TTCTGACATA CTGTGGTTCA TTTTAATTCA
 TTACAAAATA CTTCTTAATT TCCTTTTGA TTCTCTCTT AATTCATGGG TTACTTAGAA TTGTGTATT TAATTINCAA
 GTACTTGGCG ATTTATCTCT CTCTGTTATT CATGTCTAAT TTAATCCAG TTGGTCTGA GAATATATTT NGATATCAAT
 AAAGCTACTC CAGCTACCTT TTGATTAAAG TTATCACAGT ATATCTTTTT CTATCCT

SEQ ID NO:2242: (Length of Sequence = 381 Nucleotides)

CCCACATTAA CCAAACACAC ACACACATGA CAACTCTAA GTCTCCAGAC AGACACCTC AAATAGGCAC TTGGTGTTTT
 CAGCTGGGGG CTGGAGAGAT CTGGGGCTTT GGCTCCAAA GGNAGGAGCT GCTGTCCCCA GAGAGGAGAC AACAGCTTCT
 GGAGGCTCTG GGGACTCATT GGATGGGTAC TGGCTAGGTA GATGGGAAGG GGGCTGTTT AAAGAAGACC CCCCACCCC
 ACTGCCCATT TCACCACAAC AGTGACTTGC TGGAGTTT GTGCCCTGCG GATTTCTGAA TATAGTGGAC AGGCATTCTT
 AAAGAGCGCA TCACTGAAGG GGCAGAGGCT NGCCTTAAA TGTGGGCTTT GCATGTTTGG G

SEQ ID NO:2243: (Length of Sequence = 359 Nucleotides)

ACCATTTATT AAATCAGACT GTTATCTTAA ACAGTTATGT AAGTTACATG TATGTTAAG TCAGAGTATT TCACATGGAA
 AAGTTTTTAA CTCCTATAGG CAAGCAAAAT CATATCACAC AATATATAAG TGGGAAGGGG ATACTGCTAA ACATTCAAAT
 AAGGCAAGTA TATAAAACCA ATAAACAAT AATGAAAAA TTCAAGCATT CCTTTAAGAG AATTCAACAC TACAAGCTAA
 ATGTACTTTC TGAGTGTATT CGTATAATCA AGGCAGTGT TCTCCTTTTA AAACATCAGG AAATGGAATA AGGCTCATT
 GTAGATACAG CTGCCCTCAA GATTCAATT TCAGTTTGC

SEQ ID NO:2244: (Length of Sequence = 362 Nucleotides)

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CCTGCCACTG AGGCAGGTGC GGCCCCAGGA CCATCACCAG GAATGCNAGG CCACCCTGGA CCAGAGGTAG GAGCCCAAGG
 TCCGGCCCTT GCTCTTTGAT TGTGGGCAGC CTCTGCCCT CTCTGGGTCT CAGTTGCCCC ATCTGCAGAG CGAGGAGGCC
 CGGGCTGGTT GGTCTTGAAG GCCCTTTTCC ATGCCGACAT CATGTCATC TAGGCCTGGG GTTCAGTTTC CTGTGGCTGG
 TGATGCTGTG GTTAAGTTTG CTTGACCCCA GCAGCCCGAG GGACTGTCTG AGTCACAGCA CAGCCCCAT TCGTGGCTG
 CTGGTGTGTG GGGTCAATTC CAGCAGATGA ATGT

SEQ ID NO:2233: (Length of Sequence = 414 Nucleotides)

CCCAAAGCCC GCACGATGCA GGCCACTNCG ATTCCACCAA GATGGACTGT GTGTGGAGCA ACTGGAAAAG TCAGGCTATT
 GACCTGTGTG ATTGGCGGGA CATCAAGCAG ACGGGCATCG TGTTTGGGAG TTTCCTGCTG CTGCTCTTCT CCTTGACCCA
 GTTCAGCGTG GTGAGCGTCG TGGCTTACCT GGCCCTGGCC GCACTCTCAG CCACCATCAG TTTCGCGATC TACAAGTCTG
 TTTTACAAGC AGTGCAGAAA ACOGACGAAG GCCACCCCTT CAAGGCCTAC TTGGAGCTTG AGATCANCTT TTCTCAGGAG
 CAGATTCAGA AGTACACGGA CTGCTGCA GTTCTACGTG AACAGCACAC TTAAGGAACT NAGGAGGCTC TTCCTTGTC
 AGGACCTGGT GGAT

SEQ ID NO:2234: (Length of Sequence = 394 Nucleotides)

ATAATCCGAG TGCTCCATCT TCAGTGCCAT CTGGACTUCC ACCAAGTGCA ACACCCTNCA NITGCTTIT TGGACCAGCA
 CCAACAGGAA TGTATCCCTC CGTGCCCTCC ACCGGACCAC CTCCAGGACC CCCAGCACCC TTTCCTCTCT COGGACCATC
 ATGTCCCCCA NCTGGTGGTC CTTATCCAGC CCAACTGTG CCGGGCCCTG GCCCCACAGG GCATATCCTA CACCAATAT
 GCCCTTINCA GAGCTACCCA GACCATATGG TGCACCACA GATCCAGCTG CAGNTGNTCC TTTAGGTCCA TGGGGATCCA
 TGTTTTNITGG ACCCTTGGGC GNCAGGAATN GGAGGGCAGT ATCTTACCCN GTAATATGGC NATATNCATN TNCA

SEQ ID NO:2235: (Length of Sequence = 376 Nucleotides)

CTGATATGAT GACAATAAAG GAGTATGCTG CTGCTGTTCC GCTTTGCGTC CTGCTACAA ACGCCTGGTG GACAACATAT
 TCCCTGAAGA TCCAAAAGAT GGCTTGTGA AAATGATAT GGAGAAATTG ACATTTTATG CAGTATCTGC TCCAGAGAAA
 CTGGATCGAA TTGGTTCTTA CTTGGCAGAA AGGTTGAGCA GGGATGTTGT CAGACATCGT TCTGGGTATG TTTTGATTGC
 TATGGAGGCA CTGGACCAAC TTCTCATGGC TTGCCATTCT CAAAGCATTG AGCCATTGTG AGAAAGCTTT CTTCATATGG
 TGGCAAAGCT GCTGGAATCG GGGGAACCAA AGCTTCAAGT TCTTGAACA AATTCT

SEQ ID NO:2236: (Length of Sequence = 399 Nucleotides)

TGGCAAGAAC ACTGAAACCC AGCCAACATC TCCTCAGCTA GGGACCAAAA CCTTTTGTG TGTAGTCTT CCGAGGTGG
 AGACTCTTCT GCAGCCAAGG AAAAGGTCCG GGAGACATGC GGAGACTCCG AGGTGGAGGA GGAGTCCCA GGAAGCGCC
 TGGACGCAAG TCTACCAAC GGCTTTGGGG GTGCGAGGAG CGAGCAGGAG CCGGGCGGCG GCCTNGGAG GAAGGCCACA
 CCGGACGAC GCTGTGCTC CGAGTCCAGC ATCTCCTTCA GCAACAGCCC GCTCTGCGAC TCGAGCTTTA ATGCGCCCAA
 ATNTGGGCGG GGGCAAACCG GCTCTTGTG GACGGCACAC GCTTGGAGGA CCNAGTNAG CTGATCTTCT GCATCGAGA

SEQ ID NO:2237: (Length of Sequence = 234 Nucleotides)

AAANTACTAA CATTTTTAAT ACAGTCTGAT CAGATCAATT CACATCACAA GGTCAACCG GGCTTGCTCA CATGTGNCAC
 AACTGAGGNA CACAATGTCC CTACCTGCCG GCTGTCCAC CTCTCTGGTT CCCAACAGCA TTGAAACCCC CTACTTCCCT
 GACCAGACTG GCATTTTTTA AAATTTTGCA TAAACTATT TCTTCCATAG NCTTCAAACA ATCAACTAGC CAAG

SEQ ID NO:2238: (Length of Sequence = 369 Nucleotides)

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SEQ ID NO:2226: (Length of Sequence = 264 Nucleotides)

GTACCTGCTC CCTGCCGSCA CCTTINTTGG TGGATATTTA GCTGCCCTCT ACAGTGGTTA TAACATTGAA CAGATCATGT
 ACCTAGGCTC GGGTTTGTNC TGTGTGGGTG CCTTGGCTGG CCTCTCCACC CAGGGAACAG CACGTCTTGG CAATGCACTG
 GGCATGATTG GGGTTGCTGG AGGACTGGCA GCCACCCTCG GAGTCCCTAAA ACCGGGCCCA GAATTACTAG CTCAGATGTC
 TGGAGCGATG GCTTTGGGTG GTAC

SEQ ID NO:2227: (Length of Sequence = 402 Nucleotides)

AGAGGATTGG GGCACCTGGG CAGGGGOGCT GGCACATTCC TCAGATCTCG GCATGTATC CTGGAAGTAC TCAGCCTGGC
 GGTACTGCCA CAGACGCGAG TTCCCGTCCC ACGAAGCTGCT GACAATCTTC TCTTCAAAGG GGTGCCAACT GACGTACCGC
 ACACAGGCCT TGTGGTTGGT CAGCTTCTTC ACAATGTGGC CACTTAGAAG GTCGTACACA ACCACTTTGC CAGTGGAGCA
 GCCACTGTAG ATGAAGCTGT GGCCAGTGT ATGAATGGGG GAGAACCAGC AGCGGATGAG GGTGTGCAGC ACTCCGTGGC
 CCGGTAGGT CATCAAGGAG CTGTCCCCTG GGAGCTTCAG TTTCGGCAG GCTTTTTCG GGCACCTTCT GCCACGATA
 GT

SEQ ID NO:2228: (Length of Sequence = 394 Nucleotides)

TTTAAAGTGG AAACAATGTT TTTAAGAGGT GATATAAAGA AATGCCCCCA CTGTAATCCC TACCATATGT TGATTCTATG
 TGGTGGGAGG GAGGGGAGAA TGATTCCTTT TTCTAGAATC AGAGAATTTG GAAAGTATCA AGAAAGATAA TAACAGAAAG
 CATGAAATAG AGTTGTGCTT TGAAGATGAA TTGGATGAAA TINTTATGTG AAGAGGAGTT TTCAAAGTT GCAGACCCAG
 GATTCTGGC CAGAAGCATG AAAACGTTTC TTCTTACTG TTCTTAGGAC CTAGGCAGCA TTCTTCCAT GTCTGCAACA
 ACATAAGAAA CAACAGCCCA AACAGCAGCA GCAACATTCA TCTGCTTTGG ATCCCATGGA CAGTCATGGT GTCT

SEQ ID NO:2229: (Length of Sequence = 342 Nucleotides)

TTTTTTTATG GATGATTGAG TGTTCCTTTA AAAATAAAAA CCCACAAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA
 GTGTAACAGG TTAGCCATTA ACACAGAATA AAGAAGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGCCT
 GGTCCGCCGA CGTCACAGTG GATGGCCCTG CGTGGCTGGG ACACAGACAG GGAGCAGGCA TGGCACCTGC GCCACGAGA
 GCAGCAAGGC TGAGCATGAC CACTGGAAAT AAATAAACAT GGTGCCGACA GCATCTTTGA ATTAGTAAGA CGTTAGCACA
 AAACAAAAAA GCACAACGAC TG

SEQ ID NO:2230: (Length of Sequence = 357 Nucleotides)

GTGGAATGCA GCCATCACAC AGTAGTTTCT GAGATTGCTT CGTCTAGGT TTTATGGGAA GATATTTCTT TTTCTACCAT
 AGGCTTCAAG GCGCTCTAAT ATCCGCTTGG AAATACTACA AAAACAGTGT TTCAAACCTG CTCTATCAAA AGGAAGGATC
 CACACTGIGA GTTGAATTCA CACATCACAA AGAAATCTCT GAGAATCTT CTGTCTGGGT TTATAGGAAG AAATCCCGTT
 TCCAACGAAG GCCTCAAAGC GGTCCATATA TCCACTTGCA GATTCTACAG AAACAATGTT TCCAACTGC TCTATCAAGA
 GGAATGTTGC ACTCGGTGAG TTGAATGCAC ACATCAC

SEQ ID NO:2231: (Length of Sequence = 304 Nucleotides)

AAGAGACGAG GTCTCACTTT NINGGCCAGG TTGGTCTCAA ACCCTGGTC ACAACAATC CTCCAGCCTC ANCTCCCAA
 AGTGCTGGCA TTACAAGCAT GAGCCACCAT GCCAGCTTA AGGGGATAT TTTTATAGAG CATCTGCCCC TGGTCTGGA
 ATTCTCTGTA GATAATACAG TTAACAGATA TTCCCCTAAG TGATTAAGAA CCTTTCATT TGACTGATTT TNCAGAAAAG
 TTACCTATG TAACCTCAGT GGGTAGCACA ATGCCTGACA CATCTTTGNA GCTCAAATGT CTCT

SEQ ID NO:2232: (Length of Sequence = 354 Nucleotides)

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CTCCAGTGGC TTCTCCAGCC CGCACAGCGG GGAGCACCAT CAGTATCCCC TTCCCAAATN TCCTTCCCGA CTTTTCGAAG
GCTTCAGAAG CGGCCTCACC TCINGCCAGA TAGTCCAGGT GATAAACTTT GTGATCGTGA AATTTTGTTT AAGACACTT

SEQ ID NO:2220: (Length of Sequence = 343 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGACGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC
CAGCGTCCCC TCCAGTCTGC ACGGGGCACT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC
CCTCTATCCC TCCCAGCACC TACTACATCG NCCINACAT CCTGATTCC TGTGTATTG GGAAACTINT NCCAGAGATG
GAGGTTCTCT CGGAGTATCT CGG

SEQ ID NO:2221: (Length of Sequence = 373 Nucleotides)

CTCTGTCTCC CAGCCCGGAG TGCACTAGCG CAATCTTAGC TCACTGCAGT TTTGACCTCC CAGGCTCAAA TAATCCTCCC
GCCTCAGCCT CCTAAGTAGC CGAGACCACA GCTGTGCGCC ACGACATCTA GCCAATTATT TGTTTTTTGT AGAGATGAGG
TCTCACTGTG TTGCTCAGGC TGGGTAGGTG TCTAACTCCT AGGCTCAAGT GATCCTCCCA CCCAGNCTC CCAAAGTGCT
GGGACTACAG GCGTGAGTCA CCGCGCTGG CTTTGTITTA GGCAITCTTT TTCGCGAGCA TCTGTTACCA GCAGCCTGAA
GNCATTTCTA TAAACAATTA TCANGGAAGA CACATGGGNC AGAGACCCTA AAT

SEQ ID NO:2222: (Length of Sequence = 197 Nucleotides)

GTCTCCGTA ATTCCCCAA ACGGTTCTT GAGGATGTGA AACCAACTTA TTGGGCTCAA TCCCATTGG TCACAGGATA
CTGTACGTAT CTNCCTTTC AGAGATTGA TATCACCAG ACACCGCAG CATACATAAA CGTGTACCA GGTITGCCCC
AGTACACCAG CATATATACA CCTTGGCCA GCCTTTC

SEQ ID NO:2223: (Length of Sequence = 280 Nucleotides)

TTTTTTTTT GCATTTTITAG TAGAGACGGG GTTTCAGTGT GTTAGCCAGG ATGGTCTCAA TCTCCTGACC TCGTGATCCA
CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGCGC CCGGCCAACT TTTTGCATGT TTTCTTTTAA
ATTTCTCTAC TTTTAATTGT ACTTCTAATA CAGACACTTC TGAAATCAGT TTTACATTG CTGCAGCCTT ACCAATTTGT
AGANACTGTT TATGTGATGT TTGATTCTT CATTTATATA

SEQ ID NO:2224: (Length of Sequence = 388 Nucleotides)

GATTGCAGGC ATGAACCACT GCGCCAGTC GAGTGGTAAT ATTTTGAAAG GAAACCTTTT TCTGAGCAGG TCTCAAAAGA
GAGGTTAAAA TACTGAGTAG ACCATGCTGT AAACAGATGT GCTGTATTTC GGGCTTTGAT ATTCCATTTA TAAAGCACAG
GCAGAGCTCA GAGTAGATTT AATGTAATC TGAAGGGCAC TAGGATTTTN AGAATGGTAA ATAAGCATTG GCTTCAACTT
AAATTCAAAT CTGCATTGGC TTGTAATAAG AGACTAGCTT GTTACTGAAG CTTTNAAGCC AGTGTITTTT TCCTATCTAG
CTAGGAAAGT CCTAGATGGT ATCTACTTCC AATAAAAGGC TGTCTTGGCC AGGCGCGGTG GCTCACGC

SEQ ID NO:2225: (Length of Sequence = 420 Nucleotides)

GGTCGAGGAG CCTGGGCGG GCGGGCGGG GACTACTCCG GAGTCAGGAG GCAGCAGNGG CGGAGGACGA GGATCTCTGG
CAGTCAGCGC CGCTCGGACG CCGCCGGCAC CATGGGCTGC TGCACCGGAC GCTGCTCGCT CATCTGCCTC TGCGCGCTGC
AGTTGGTCTC AGCATTAGAG AGGCAGATCT TTGACTTCCT TGGTTTCAG TGGGCGCCTA TTCTTGGAAT TTTTCTACAC
ATAATAGTTG TCATATTGGG TTGTGTTGGG ACCATTCACT ACAGACCTCG ATACATAATG GTGGACACCG ATCTAATGAC
ATTCAATATC TCTGTACATC GGTCAATGGT GAGAGAACAT GGGGCTGGT TGTNTCAAGA AGAGTGCTGC CTTCCCTCAA
GCCCCATGGC ANNGATGGAC

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AACCCCTTCT ACTTCIGAGC TGGGGGTAGG GGCACACACT TGGGATTGGT TCTTCAAGTA TATATTTTIN CCAAACATTA
GCTTCAGTGA AGAGTCTGG ATGATTTTCA CAGCTACACC CCTAAAAGCT ACATGGACAG AAAGACGTCA CAAGGCGCAA
GGTACATAAC GGTGGGTACA TAT

SEQ ID NO:2214: (Length of Sequence = 259 Nucleotides)

GTCATGGAGA TCCACAGCAA GTACTNGCGC TGCTGCAGG ANCAACCTCC ACAGCGGGGC GTTCTCTGAT CGAGGCTCAG
ACTTTCGAGA ACGAAGAAGC CGAGACGGTC ACCGCCATGG CCTCGCTNTC CGTGGGCGIN AAGCCGCGC AAAAGAGACC
AGATGAGGAG CCCATGGAAG AGGAGCCGCC CTTNTAGCAC TNCCTCGAAG NTGCTGTCTT CTTGTCTGTC TGTCTCTGTC
TTTAAGCTCA GCCAAGAAA

SEQ ID NO:2215: (Length of Sequence = 378 Nucleotides)

CACACATCCT CACCCACAG AAACGTCTGG ACACACTGAA GAAACTGAAT AAAACAGATG AAGAAATAAG CAGTTAAAAA
AATAAGTCGC CCTCCAAAA CACGNCCCCA TCCACAGCG CTCCGCAGCT TCCCACCACC GCCCGCTCA GTTCTTTTGC
GTCTGTGTC TCCCCAGCCC TGCAAGCCCT GGCTGGCACT GTTGCGCTG CATTCCTGTC TTCAGTGATG CCCCTTCTT
GTTTGAANCA AAAGAAAATA ATGCATTGTG TTTTTTTAAA AAGAGGTATC TTAATACATN GTATCCTAAA AAGAGGAGCT
CATGTGGCAA TTGGTGCACA GCAGGAGGAA ATTTCTTGGG ACTTNTTTAG GNTGAATT

SEQ ID NO:2216: (Length of Sequence = 428 Nucleotides)

GAACCCACAC TGGGGAGAAA CCATATGAAT GTAAGGAATG TGGGAAAGCC TTCAATTATT CCAACTCATT TCAGATACAT
GGAAGAACTC AACTTGGAGA GAAACCTTAT GTATGTAAGG AATGTGGGAA AGCCTTCACT CAGTACTCGG GCCTTAGTAT
GCATGTACGA TCTCAGAGTG GAGACAAGCC CTATGAATGT AAGGAATGTG GGAAATCCTT CCTTACATCC TCAAGCCTTA
TTCAACATAT AAGAACTCAC ACTGGAGAGA AGCCTTTTGT ATGTGTGTAAG TGTGGGAAAG CCTTTGCAGT TTCTTCAAT
CTTAGTGGGC ATTINAGGNA CTCACACTGN AGGAGGAAGG CCTCTGAAGT NINAGATATG TGGGGENAAGT ATTTTGGGNG
ATCCCCCAT GTCTTTAATA ATCCCCAT

SEQ ID NO:2217: (Length of Sequence = 408 Nucleotides)

GTCATCAGAG TTCATGTGA ACACCTGAA TGCGGCTCG GGGGCCTTGT CTGTCACCAT TGATGGCCCC TCCAAGGTGC
AGCTGGACTG TCGGGAGTNT CTTGAGGGCC ATGTGGTCAC TTATACTCCC ATGGCCCCTG GCAACTACCT CATTGCCATC
AAGTACGGTG GCCCCAGCA CATGTGGGC AGCCCTTCA AGGCAAGGT CACTGGTCCG AGGCTTTTCC GGAGENCACA
GCTTINACGN NACATCCAG GTTCTTTGTG GGAGACTNTN TACCAAGTCC TTCCTTAAAG CCGGGGGCTT TCAGGTTACA
AGNTTCCATT CCCCAAAGTT TTTCTCTCAA AATNNCCAGC AAAAGGTGGG TTGACTNGNG GGCCCTNGG GNTTTTCCCA
GGGCTTTC

SEQ ID NO:2218: (Length of Sequence = 316 Nucleotides)

TTTACAGAAT ATAGCTTTAT TTATAGAATC TTACAAATAA AACATTTACA GTCCACATAA GTTAATTINC TTTTCTAATT
TCTTCTCATA CACCTGAGTT ATTTAAAAA ATACTGTGAT GGAAGTGCAG AACTGTAAAG GGAAATAAGA ACAATAAAAT
CCTAACCTCT CTTGCAAAAA TCAGACAACT TTGTTTAAA GTAGATGCC AGCATATTGC CATCTCTTTG GAAGAGGACT
TACTTACTC AGCTCTTACG NTACCCAAAC AGAGAAGCCT TCTTTTAAA ACCCAAGGT AAGGGCCAG TGAAGG

SEQ ID NO:2219: (Length of Sequence = 319 Nucleotides)

GGCTTCTGT CCCACAACIT TCTCAGGTG GCGCTGGAC ACAGCAGCCA CCACAGTCCA GGCCTGCAGG GCAGGGTGTG
ACCCCTGCCG GGCAGCCACC CCTCCCTGAG AAGAAGCGGG CCTCGAGGG GGATCGTTCT TTGGGCTCAG TCTCTCCCTC

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SEQ ID NO:2207: (Length of Sequence = 348 Nucleotides)

GTGTTTGTIT CTCTTTCCAC CATAATTGTA AGCTTCCTAA GGCTTCCCA GCCCTGTGGA ATTGTGGATC AATTAAACCT
 CTGTCTTTTA TAAATAACCC AGTCTGAGGC AGTTCTTTAT AGCAGCGTGA GAATGGACTA ATACACCTCC CTCTTTGAGT
 CTGGAAGAAT ATGTGAAGGG AGATTGCTAA GGACTTATTT ACAGAATGGT TCTTAAAGTG CTTGGGCAAG AACTATGTAT
 TINTGGAGGC TGGTAGTGT TCAGTGAATC TGAAAACCTT TGTGACATGT GAGAAAGGTA TGCTGTCTCT GAAAGCTAAG
 TGTATTATGA AGGATCTATA AAGGGCCA

SEQ ID NO:2208: (Length of Sequence = 154 Nucleotides)

GAATCCTGCT GTGCACATG CTTCAGATGG CTAATTATAT CTTTGGACTG TTTGTACAAC CATTGACAAA TATACTTACT
 TTCATTTCTG CTAATGCAAC TGAAAAGAGC ATTCTGTAAA TTGAAGAAAA ACAATAAAC AGNAATTAAC AACC

SEQ ID NO:2209: (Length of Sequence = 352 Nucleotides)

GAGGTTTCTG ATCTCCATC CAGCATCTTC CCTGGTCACA TGGTCCCAAC CTTTGTCTCC ACCCCCTTCT CTGTTCCTCC
 CGCAGTCCAT GCTCCAGCCA TCCTGACTCT GTCCCTGGAT TTCTGGCTTA CTGACACCTG AGCCTGTGCA CAGGNCCTCC
 CTCTGTATA GAGCAGCTT CCCATCTTGT GGACTGTCTT CCCATCTTGT GGACTCGGAG GGTTCGGAGC AGCCGTTGAG
 GTGANGCTCC TATGACACCT CCNCCGTGAA GCCTNCCTCA CTTTCCATT ACCAGTGAGG CCTGCCACAG CTTGATTTGT
 ACTCTGATCC TGGCAGCAT GGAAGCCATC TT

SEQ ID NO:2210: (Length of Sequence = 338 Nucleotides)

GTCTTTCCAT CAAGAGTCAA TGTATATGCA AATATAGACT TAAGAACATA AGCATCCTGG TTTAATGTTG TTGTGAGCCC
 TGTGGAAATA AAATTAACT CAGTGAATGT TTACAAATCA ATACATAGTA ATCCTATATA TGAAAGCTAA GATGTATAAG
 ATGTTTATAA ATTNCTATT AGAAAATACT GCTTTCTTAA AGGTGATTTT AAAAAGCTAG CTGATATCTG ATGGCTCAAG
 CATCCAGAAA ATGTATGCAA TGATAAGNCA TTGACTAGGA TGAACAGAAA AGGGATACAG GAAAAGTCCG AACACATGAA
 ATTCTAAATT AACCAAGA

SEQ ID NO:2211: (Length of Sequence = 353 Nucleotides)

GTTCCTGGAG TACCTCTTC CCCCACCCC AGACCTGCTT TCAGAGCAAA ACTCAAGTCC CTCTTCCTCC GTGAAGCTTC
 TCCCTCAGCT GAGCAGTGAT CACTTACTCA CTCTTAACCC CAATCCGCTG ACTGGGTGGG GACAGCACGT CCAGCCTTCC
 CACCTCTCCT GCAGGCTTCT AGACGGAGTT TCAAAAACCTG ATGAGCCTCG ATCCAGGGCT TGAAAGAAGC CAGGGTGTA
 TCTTGTTTAT GCATGCNTCC CCAGAGNCTC GCCCAGTGCC TGNACATAG TAGGCACTCA ATAAATGCTG AATGGGTGAA
 TAGTTGAATG ATAGGTGCTC AATAAATGAA TGA

SEQ ID NO:2212: (Length of Sequence = 293 Nucleotides)

GAGAAAGGAG GCAATCTCAG TCTCGTCTC CAAAAGGGA TACTACTAGG GAAAGCAGAA GATCTGAATC ACTGTCCCCA
 AGAAGAGAAA CTTCTAGAGA GAACAAAGA TCTCAGCCAA GAGTGAAGA TTCTTCCCCA GGAGAAAAAT CCAGGTCCCCA
 GAGCAGAGAA CGAGAAAGTG ATAGAGATGG GCAGAGGAGA GAGAGAGAAA GGAGANCCAG AAAGTGGTCT AGGTCCAGAT
 CTCATTCTAG GTCCCCCTCA AGATGTAGAC CAAAAGTAA GAGTTCATCA TTT

SEQ ID NO:2213: (Length of Sequence = 423 Nucleotides)

NATTAACACC ACAGTGATAA ACAACTTTAA GCTTATGTTT CTTTATAGAT CACTGGCTCA CACATAATTC AAAACCCACA
 CAGAAGCTAA GAGTCTTTAC ATTAATATA TTCTTCTTAA AAATCCTTAC TGTATGCATC TGTCCTCAAG CAGTAAAATT
 TGATTATGCA CCATTTTATA ATTAATATGT CACATTTACA TAGCAAAATA ATGAAGGCAC AGCTAATACA AGCAAACTTA

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TCCTCAGTCT ATAGCATTAT TAACTTTCTA GGAGCAGCAG TGGAGTAGAG TGGTACTGAA TTGGTCACAG ACTTCATCCG
ATTATCAGGA TCCTGG

SEQ ID NO:2201: (Length of Sequence = 315 Nucleotides)

GAAACCAATA TAAATTTCAA AATAAACAG CATAACAGC AATTGCAATT TATAGAAAA ATAAAAATGT AGAAACATCA
CCTCCTCTCC CCGACCCAG TACTGAAAT ATACTTCCTC AGACATACTG CCCATCACT GGAAGGGTG CCGACAGATT
GGGTACATTT ATAGANTATT AAATAATTAA GTAACAGAGG CACCGTTTT GCATGTATGG TCCCAAAGAC TTTTCACTT
NTTTTTCAAC ATTACAGTIG TTAAGAATGG AAATTGAAGG AATTGTACAT ATTTTCACTG GCAGTTTCTT ACAGA

SEQ ID NO:2202: (Length of Sequence = 328 Nucleotides)

GCTCTGTAC TCAGCCTGGA GTGCAGTGGT GTGATCTCG CTCACAGCAA CCTCTGTGTC GCAGGTTCAA GCAATTTCTA
TGCCCTCAGG TCCTGAGTAG CTGGGATTAC AAGCATGCGC CACCATGCCC AGCTAATTTT TGTATTTTGA GTAGATACAG
GGTTTCGCTT TCCTGACCTC AAGCTATCCA CTCGTCTTGG TCTCTCTCAG TTCTGGGATT ACAGGTATGA GCCACCATGC
CTGGCCGGA TATATATATT TTTTACCACT CTATTTCCAG TGCCTAGACT AAAACCCAGC ACATGGTACA CGTCATACAT
AAGGAAGG

SEQ ID NO:2203: (Length of Sequence = 268 Nucleotides)

ATTTTGTGCT CGTCGCTCAT GCCACCACTG GGACCAAGG GGT CGGG AGTGGTTTTT CTGGCTTGT TCAGCCTTTT
CAGGCTCTCT TCATCTTCT TCACAGAGT TAATACATCT GACACGGTTT CATAGTACTT ATGAGTCTT TCACTGAGAG
TGCCCTCTAG CCACTGCTGA ATTATTGCTT GTTGTAGCTT ATCCTGTGT CCGCTCTGAA GCTGGAATAA GGGCTTCANA
GCATGTCCA CATAGGAGGA AGCTTTGG

SEQ ID NO:2204: (Length of Sequence = 353 Nucleotides)

GTAAATCINA GTCAAGGAT GTCCCATGAT GGATGATGAC TGANATGGAC GGAAGTTTGG TTTGAAGCGG TGGCATTGGT
GCAGGCTGGC AGAGGGGGCA GTTCTGGATA GAGTGTCTG ATGAATGGGG ATACTCATGG GAGGTGATGC AGATGAGGAT
TCINTGCTTC TNAAGGAGGA GCCAGGCATT TAGAATGGCA CTGGAGAGCA AGGACTGACT GANCCCCCTC ACTGTGTCCC
CAAGAGGCA GGAAGGGAAG ATTGGAGGAG ACAAGTTGA AGTGTGTTTT CCAGGGAACG AGTCAGTTAA GAGATGGTAG
GATCTTAAGG GAAGATGGCT AAGATCTTAA GGG

SEQ ID NO:2205: (Length of Sequence = 265 Nucleotides)

GTTTACCAT GTTGGCCAGG CTGGTCTCAA ATTTCTNACC TCAGGTGATC CACCCCTCTT CAGCCTCCA AAGTGTGGG
ACTACAGGCG TGAGTCACTG CGCCAGCGG TGGTTTTTTT TTTTATAGAA CAGTGTTTTG CCATGCTGCC CAGGCTGGTC
TCAAATCCAT AGGTCAAGT GATCTCCCCA CCTCAGCCTC CCAAAGTGTG GGGACCACAG GCATGAGCCA CCATGCTTGG
CCAGAAAGAA GTTGTTAACA AAATG

SEQ ID NO:2206: (Length of Sequence = 340 Nucleotides)

GCAAGCTTA TTTTTCAGT TGTGGCTCT AGTTTGGTTG GGAACTATT TCCTTAGACC TGGGTACCC CTCGGGCTCC
CTTAATCTCC CGCCATATGT TCTCCAGAAT CAGGGCATGG TGTCTGCCC TGGTGGGACT CAGCCCGGTT GCTTTGCACA
GACTCTGGGC CAGGCAGGA TGTCGGTGT TGCCGGGTG TCGCCGGGTG TTATCTGTGG CGCTCAGTAT GGTGCATAGT
GTAGACACGT GCCCTAGGTG GTGTTAATT GATCTGGGTA AGACTCAGNC AAGGCAGGC ACAGTGGCTC ACCTCTATAA
TCCAGCACT TTGGGAGGCT

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TAATTCATTT GAGATTCCAC TCGATTCTAC TTGAGATTCA TCCACATTGT TGAATGCACA TTCTTTTTTA TTGTTCTGT
AGCATTTCTGT TGTGCAGCTG TGCCCCAGTT TGTITANCTA TTCACTCTCA GTTGTITCCA GTTTTAATGA CAACTTCAG

SEQ ID NO:2195: (Length of Sequence = 172 Nucleotides)

TCAAAGTCAG CTCTTGACC TGCAGGGCTT CAATTTGTGG CTGACAGTTT TAACTCAGAA AATCCCTGAC TTGATTGGCT
ACATAAATNA TATGATATAT AGCCATTAAG ATCATGGTTT TGGAAAGTAT TTTAATGATA CAGGAATGTG CTCTGAAATA
ATAAGTGGGA CT

SEQ ID NO:2196: (Length of Sequence = 398 Nucleotides)

GCAAAAAAAA AAATTATTAT CTCCACTTTA CCAGTGCTGA CACTTCACCA ATGTAGGGCT CTCAGTGA CTAGCCAGGGT
CATGCACAGC CTGTTTCAGC AGCTACCTTG GACTTGAACC CAGCTCGGTC TGTCTGACTC AATGCCTATA GTCTTAACCT
TTCCAGCAGC TGCTTCTTTG TCAAACAGGT CCTCCCGCAG GTTTTCACAG CCCAGCCCCCT TACTCAACAA GTATTTATG
ACAGGCCTCA GGAACACTAG GCAAGTAGGA TAGCAATGAA CAAGATGCTG ACCTTGACCT TGACCCCTGCA TCCATAGTAT
GAGCATTTTA ACTGGGGGAG GGTTTGCAAA GTTCTCTTAA ACAGTCTACT ACATGCTCTG TAAGCATTTT CTATGGG

SEQ ID NO:2197: (Length of Sequence = 313 Nucleotides)

GTCCCTGTG CATTGAGTGC ATCCCGCTG GTGACTAAGC TGCAGCAAG CGGCTACCCC CCGATCTGCA AAAGGGCTTC
TCCCTTTGTG TTCTATACAT TGTGAATCTT CCGTCTGAA GAACGCCAG CCTGCCGAGA CAAAGCCCCG CCTTNCCTAA
AGCAGAGGGG CTGTCTGTGT CTCCAGAAAG GGGACATCGG GGGGGAGGGG GGCTCAGAAA GGAGAAGGGC TGTGATCTCC
GGTCCCTTCC CCCATCATCC TTCTTAGAC TGATGCTTTG ACTGAATCAT CACTAGCTAT GGGCAITAAA AGG

SEQ ID NO:2198: (Length of Sequence = 360 Nucleotides)

GGTCTACTA TGTGCCCCAG GCTGGTCTCA AACTCCTGTT CTCAAGCGAT CCTCTGCCT CGGNTACCA AGGTGCTGAG
GTTACAGGGG TGAGCACTGC ACCTGGCTAG GAAACTNAGT TTTTTCAGTG GTAGAGGCTC CTAGCCAGTG GCCAAGGGAA
AGAGAGAGTT CTGGGTTCAG GGGCTGGCAG GAAGTCAGCA AGACACCAGG GACTCGGCTC CACTGGCTGG ATCTCAGGGA
AGAGCAACTG CCACAGTGGG GACCTGGAAC ACAAAGGGAA ACTGAGGCAG CAGCTGCACC ACAGTTTACA AGTAGAAAGA
CCATGCTTGA GGACAACAGA AGTTTCACTA AGGATGCACG

SEQ ID NO:2199: (Length of Sequence = 374 Nucleotides)

TTTTGGGTAG TACCTTGCC CTCTTCATGG CCACTTCAAA GTGAAGCCAG CAAAGTGATA ATACTTTATC ATTTAGTATT
ATCATAAAGT ATTAATACTT TGTATAAAG TCCTCCTTGA GCCAGGGAC CATGGAAGTC AGCTAGAAGA GCCCTGAGCA
AGGAGCAAGG ACTTGGGCTT CTCCACGCTT TGCTCCTGGC TTGTTTGACC TTGACTCATT CCCCATATGT CTTTGAGGAG
GCTCAGAAA TACTAAAGCT GGGAGGAAC TTGGAGATCT ATAGGTCAAA CCTCCCCATT GGGCTGATGA GAAAATACAC
GCAGGCCTAG CATGCTGCCT GCCACCATGG TGGGATCCAG TATGGTTTTA TAAA

SEQ ID NO:2200: (Length of Sequence = 416 Nucleotides)

CTACTAAAA TACAAAAATT AGCCAGGCGT GGTGGTGGC ACCTGAATC CCTACTCAGG AGGCTGAGGC AGAGAATCGC.
TTGAACCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCGT GCCACTGCAC TTCAGCCTGG GTGACAGAGC GAGACTCCAT
CTCAAAACAA AACAAGCAAA CAAACAACAA CAACAAAAA TACCTCTTGA CTTCTAAAGA CGCAAAAGTG GCCAAAGTG
CAATACAGTA TTGTGTTTAT TTACATCTAT TTTAAATGCA TGTGATCTG TAAATNCAA GTGATTCGTG ACTCATGTG

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GGCCCCAGCT CCTCTTCTG CCTCTMINAT GGCTTGGGCT GGAGTGGGCT CTCTGGACCT GACCGGGGT CAGACTGTGG
 GTCCCTGCGT CTCCTGCCCA CTCINACCGG GCTTCTCCC TCCAGCTTA GGGTCTGTCC CGGGTACTCA GTCAGCCAG
 TGGGATCTTA CCCACTTCCC TGCAAGGTGC ACCTGCCCCA GGCTCAGGCT GCCCAGCGGC TCTTCTTGA CAGTAAGAGC
 AGGGCTGGGC GCCTCTTTC TGCCCCGAA GCGCAGGGG CCCCTCCTCC AGAGCCTNGG CGCAAGGAAC ACAAGGCTGC
 CGCTGCTCTT CCAGG

SEQ ID NO:2189: (Length of Sequence = 366 Nucleotides)

AACCTGGTGA TCAGATCGAN TTCTACTTTT CTNATGAAAA CCTGGAGAAG GACGCTTTT TGCTAAAACA CGTGAGGAGG
 AACAAAGCTGG GATATGTGAG CNTTAAGCTA CTCACATCCT TCAAAAAGGT GAAACATCTT ACACGGGACT GGAGAACCAC
 AGCAGATGCT TTGAAGTATT CAGTGGTCTT TGAGTTGAAT GAGGACCACC GGAAGGTGAG GGAGGACCAC CCCCCTCCCA
 CTGTTCCCCA ACGAGAACCT CCCAGCAAG ATGCTCCTGG TCTATGATCT CTACTGTCTT CCTAAGCTGT GGGCTCTGGC
 CACCCCCCAG AAGGAATGGA AGGGTGCAAG AGAAGGTGAT GGAACA

SEQ ID NO:2190: (Length of Sequence = 333 Nucleotides)

CTGCGATCCA GCCTAGGCAA CAGAGTTGAG ACCCTATCTC AAAACAAACA AAACAGCCAG GCACGGTGGC TCATGCTGT
 AATCCAGCA CTTTGGGAGG TCGAGGTGGG GGGATCACCT GAGGTCCGGA GTTCGAGACC AGACTGACCA ACATGGAGAA
 AGCCCATCTC TACTAAAAAT ACAATATTAG GGGGCGTGGT GGTGCATGCC TGTAAATCCA GCTATTGGG AGGCTGAGGC
 AGGAGAATCG CTGAACCTG GGAGGCGGAG GTTGCACTGA GCCATGATTG AGCCATTGCA CTACAGCCTG GGCAAGAGCA
 AAACCTCGTC TTC

SEQ ID NO:2191: (Length of Sequence = 284 Nucleotides)

AAGTTTATAA AAGTTTGATT ACTGGAAAAG TCGATCTAA TTCAGAAATT TCAGGCCAAA TGAAACAGCC CCTTCAAGCA
 AACATGCCTT CAATCTCTCG AGGCAGGACA ATGATTCATA TTCCAGNGT TCGAAATAGC TCCTCAAGTA CAAGTCTGT
 TTCTAAAAAA GGCCACCCC TTAAGACTCC AGCCTCCAAA AGCCTAGTG AAGGTCAAAC AGCCACCANT TCTCTAGAG
 GAGCCAAGCC ATCTGTGAAA TCAGAATTAA GCGCTGTGC CAGG

SEQ ID NO:2192: (Length of Sequence = 260 Nucleotides)

ATGACGACGG CTACCTCGAG GTCATTGGCT TCACCATGAC GTNGTGGCC GCGCTGCAGG TGGGCGGACA CGGCGAGCGG
 CTGACGCGT GTGCGAGGT GGTGCTCACC ACATCCAAGG CCATCCCGGT GCAGGTGGAT GGGAGCCCT GCAAGCTTTC
 AGCCTACGC ATCGCATCG CCTTGGCAA CCAGGNCACC ATGGTGCAGA AGGCCAAGNG GCGGAGCGCC NTCCCCCTTG
 CACAGCGACC AGCAGCCGGT

SEQ ID NO:2193: (Length of Sequence = 247 Nucleotides)

GGTCTCAGCA CTCGCTGGGT GACCGCGGG AGCAGGCAA GGAGGGCTCC CAAGTCCGTT CTGCACTACT GGGGAGGGA
 ACAGACCCAG GNTCCTGGGA ATCTCTTCT CCTAGCTTT GCTGCTGC CAGAGCAGGG CCTGCGGTTT GGGTCTGTIN
 ACCNTCCGGG GCGGGGGGA GGGCAAGGA GGGGATCTC TGAAGTCCG CCAACTTCG CTNCTGATCC CCAAGGTCA
 GAGAGGG

SEQ ID NO:2194: (Length of Sequence = 399 Nucleotides)

CCTCCATCTC CCGGGTTCAA GCGATTCTCG TACCTCAGC TCACAAGTAG CTGGGATTAT AGGTGTCCGC CACCACACCT
 AGCTAATTTT TGCATTGTTA GCAGAGATGA GGTTCGCCA GGTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAAGTGAT
 CCACCCACCT TTGTTGGCCT CCCAAAGTGC TGAATTACA GGCAACATGT AGCCTTTGAG TCTAGCTTCT TCCACTAGCC

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CTCCTTGAGT CTGTTGACAC GTCACATGGT CAAAGTCTCC TCAITTCAGC CAGTCTCAAC ACAAACACC CAACAGGGAT
GCACTCAACT TGTTGGTTCC ATGTGGAAGT AGGTGGCAGG GCGAGAGGA AAGTAGTAGA AGGGGGCTAT GGTGTGCTG
CAITTCAGTCC CCTCACATAA AGCCACATGG ATCTAGGGGG GTATCCAAGA GCTCTGGTGG GGTCCGTGTT GCACCTAAGA
CAITATAGGT CAGAGCAAGT TGCTCAGAGG GTTCCAGGCA GGGGGCT

SEQ ID NO:2183: (Length of Sequence = 389 Nucleotides)

GATCCAGAGA GGGCTCCAGG TGGAGTCCCT TTTTCTGCAT AAGGGGCTGT GACCGAAGCA CAGAGGGGAA AAAAAAAGT
GGTGGGAGCC TCCTCTGGTT TCACCTGAAG AGGGAGGTGG AAGGGCCTGA AAATAGATT TTNTTATAA ATAATAGATA
TTATAGGTAT ATTTNCATAT TTTTACATAA TGATGCCAAC CACAAACAAT GGACCATAAA GCACTGACCT CAGAATGATC
AAITGCAAAA TGTTTAAACC CTGGGAAGCT TTTGCTTAGG AGGGGGGATA TTCTGTGTTG ATGTTATTCT ATAGCCATAA
ACTTCCCTGA ATTTNCTGCT AATGTATCCA AGTCCAGGGA AGTCACTTAA AACTCTTCAA ATGCAGCTT

SEQ ID NO:2184: (Length of Sequence = 383 Nucleotides)

GCAAGAGAAG CGGTTTGGGT CTCTGAAGGA AAGGCCAAAA CCCAGAACAA AGAAGAATCC TATGACTTCT CCAATCCTA
TGAATATAAG TCAAACCCCT CTGCCGTGTC TGGTAATGAA ACTCTGGGG CATCTACCAA AGGTTATCCT CCTCCTGTTG
CAGCAAAACC TACCTTTGGG CGGTCTATAC TGAAGCCCTC CACTCCCATC CCTCCTCAAG AGGGTGAGGA GGTGGGAGAG
AGCAGTGAGG AGCAAGATAA TGCTCCCAA TCAATCCTGG GGCAAGTCA AAATATTTGA GGAAGATGNN TCCACAAGGC
CAGGTTACAG AGGAATGCAA GGAGCTTCCA GGAAGCACA GAATCCAAG TTTTCGGAAA TTT

SEQ ID NO:2185: (Length of Sequence = 359 Nucleotides)

CTTTAATTCA CATCACAGCA GTCAAGGAAG TGGGGAAAGG GGAAAAAAT CAAGTGGCAG ATATTTACAT CTAAAATTCA
CAITACTTGT TGGATTTTGA ACATGCTACC ACAATATATA CAGTAAAATA CCTCTTGGGA CAATGGTACA AATTTTGT
CCTTTAACIT TGCTTTCTG GTACAGGTAA GATCATTTTT AAATCACTTT TTTNCTTTAA ACATGAATAC ACAAAGAAA
TGGTTAGAAG TTTCTTGT TTAATAAGC ACAGAATGCG GGAGGTTAAA AACACATTTA TAGTGCTGAA TACCAATTGG
NCATCACACT CTATACATTT TTGCTCAA TTCTGTAC

SEQ ID NO:2186: (Length of Sequence = 337 Nucleotides)

ATAGTTATAC TCAGTGAAAT TAACAAGACC CAAAGGTGGT ATTGTCTAGG AATAAAAGGG ATAATTTTGG TTGTTACAA
AAGTAACTTG TCTAGCACCA CACATCAGAA AAACACAAAA ATAGCACACT CTAGTTCTAA ACAGCTATGT CTAAAATAGA
TTATATAGTA AAACCGGTAT TATACAGCAT ATTGTGGATT TGATAAACAG ATAAATATTT GCNCTGAGTA GGCTGTTTAT
AATATAACAT TTNCTATCT ATACAGAATG AAAGCCAAAA AGTTAACTGT ATAGAGATGT GCAGACAAC ATTAAATATT
ATGGCTCAA AGCAGG

SEQ ID NO:2187: (Length of Sequence = 329 Nucleotides)

GCAITINTCA GCACAGATAG AGCCCTGTCC CTCCACCTAG TGCCCACTCC ATGACTGTTA ATAATAACAA TAATAATAA
ACTACTGGCC AAGCACGGTG GCTCATGCCT GTAATCCCAT CACTTTGGGA GGTCGAGGTG GGCAGATCAC CTGGCCCAAC
GCCACCGCT CTAGCTCCGG GCTCCCTGAG GTCCCCAGTG CCGTNNCCGG TCCCACGGCT CCCACGNTGC CACCTGTCTC
TGACTCGCCA CCTGCTCTTG TGGGCAGACT GCTGATCGAG TTCACCTCAC CCATGCCCTT GGAGGCGGGT GCAGAGGGAG
AACCAGGC

SEQ ID NO:2188: (Length of Sequence = 335 Nucleotides)

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ACCTGGAGGT CCTCGGCTAC TCACCTGGG GGCINCTTGC ACAGCCCAGG AGCTAGCCCA GGGCTGCC TC AATGGTTC
CCG

SEQ ID NO:2176: (Length of Sequence = 399 Nucleotides)

AGGCAACTAT TGAGGGAAGA GGCAGAAAA GGAAAAAGGA ATGTACGTAA GGCAATTTTN CTTAAAAGTA CAATAAGCTT
AATAGTGT TT TAGGAAGACA AGATAAAAAT TACTCAAGGC TAGCTTGGTT CTCCTGAAT AAAACAAAG GACTAAATAC
TGAGCTCCTT CTGTGTGGAT CTAATAATCA ATGCTTGGT CGCTATATTG GTAATCTCTG GGGTAGTCAT CCTGGTACTC
GCCATGATAC TCATCAGGT ATTCTGCC TGATAATCA TCACTGATTT CGAACCATT TGTTCCTGTT CCTTGGCTTC
CGTTGTGAAT GACAGGTCT GTAGGAGCAG CACAGTATTT GGGGATCATA TACTTGCCGN CCAAGGCCAT ACAAACCTCA

SEQ ID NO:2177: (Length of Sequence = 302 Nucleotides)

GGTTTTTATA AAAATCAGAA TTTTCAAAT GCATTGGTCA TTTTCAGATG CATTTGGTCA ATTTCATTAT TCCATATCAA
AAAATGCTAT TGTTAATGT CACACAAATC TCATTGGAAA GGTCTTCAAG TATTGTGAAG TGTCCAGGT CACAAAGATG
AATGCTAGTT TTTCAAATTT CTAATTTTAA CTGAATGCT CAAATCTTAT AATTGGTAA CCGGTGAGTT TTTCTTAGT
TGATAGGCTT ACTGCTTTTA TGTGTGAGA ATACTTGTCT GTGAAACATC CAAATCTGGA AG

SEQ ID NO:2178: (Length of Sequence = 343 Nucleotides)

GGTTTCACTC TCCTTGCCCA GGCTGGAGGA GCAATGTCAT GATCTGGCT CACTGCAACC TTCTCCCTTC CAGGCTCAAT
CAATTCCTCT GCTCAGCCT CCGAGCAGC TGGGACTACA GGTGCGTGCC ACCATGCGCA NTAGGTTTTT TTTTGTAGA
GACAGGGTTT TGCCATGTG CCGAGGTGG TCTCAACTC CTGAGCTCAA GINATCTGCC TGANGTCTG GGATTATAGG
TGINAGCCAC CACATCCAGC CTCCTTTTAA TGTGTGTG ATTATTTATA GTGAAAGATT TAAATTCCTT TCTATTCCT
TGTGGTATAT ATTCTATAGG CTA

SEQ ID NO:2179: (Length of Sequence = 377 Nucleotides)

AGATCATCAG GAATTAGATT CTCATAAGGA ACACACAACC TAGACCCCTC AGAGGTGCAG TTCACAGTAG GGTTCATGCT
CCTATGAGAA CCTAATGTG CAGCTGATCT GACAGGAGGC AGAGCTCAGC TGGTAATGCT CACTCACCTG CTGCTCACCT
CTTCTGTGT AGCTCGGCTC CTAATAGACC TGTATGTGTC CATGCTCTGC GAGTTGGGA CCCTGCAGG AAGTCTGTGA
AATGATGTC AGGAACTTA CTGTTACAG CCACATAGTT TGTAGTAGTA AGGAACTAG GACAATCAA ATATTCACTA
NGGGGAAAC TGGGATAAAT TGTGGGTCAA TTTCATATGT TTCATACAGG AAAAAAG

SEQ ID NO:2180: (Length of Sequence = 195 Nucleotides)

GATATTTGCT TTTCTCAGAA CCATAATCGA TACAAGATGC AGTGACCAAT TCATTCTTAA AAACACCTGG GCTCCTTAAG
CGGCTAGAAG ACACAAGTTA CATCCAGCCC ATCAGGGAGC CAGAGGNGA GGGGTCCCA GCCAAGCTCT GENCAGGCCT
GCCATGGGGC AGNGCCTGAC CGTNCAGCCA GAGGT

SEQ ID NO:2181: (Length of Sequence = 244 Nucleotides)

TGCGGTGGGA ACGGCCCCG AGCGGAGGA ACGTGACTCC CCAGAGGGA GATGGGCATC ATACTGGGC CAGAGCTGGG
AAGGAGTTGC TGCCAGCACA GGTGGGCT GGAATCCCT CGCCCCCTACC CCAAGTGGTT GTGGCTGTAG CCTAAGCCT
GGAGAGCAG ACCGCCCCG GGTGTNTNGN AGGCTGCCAG GTGCCCTCCA GAGCTCCCA GGGCCCCAC CTGCAAGTNC
CAGC

SEQ ID NO:2182: (Length of Sequence = 287 Nucleotides)

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TGTTGCATCT TTAACAGCTG TGTTTGGAAA AGGGTGAGGA ATTGATTTCAT CAATATTCAA TACTAAGCTG CAAAATCAGG
AATGCAGCCA ATTGGTTTAA TTGATCAAGG CTTATAAACT CTTAAGGGAC TCTAGTGAAC TGATACAAAC TA

SEQ ID NO:2170: (Length of Sequence = 273 Nucleotides)

GTTGTGTGTG ATGCTGTGTG TGTTGCTTTC TGTTTGTTTT TCTTGCAATG GTCAGGTCCC ACTCTGAACT CCGGGGGGCA
CCAACCTGAT GCCAGTAGGA TTGCCCTTGT ATAGGGTGTC TGACAACCCC TGTTGAGGGT CTCACCCCTGT TGGGTGGCAC
ATGGAATAGG ACCCATTTAA TGAAGCACTT TTTCCCTTGG TGGAGGTAGT GTGCTTTTCT GGGGAAAAAC CCCTTGTCT
GGGCTGCTG GATTCTCAG AACTACCAGG AGG

SEQ ID NO:2171: (Length of Sequence = 357 Nucleotides)

GTGATGTACC CCAGCACTAG GGAATGATGT GAGTAAGACC TAATCCCTGC TCTCAGGGAG CTTATAGCCT ATGGCAGCAG
CAACACTAGT AAAAATTTAC TACTTTGATA GGTGCACATC TTCCTTTGGT CAGCAATTTT CTCAAAACCA CTGTAACATT
TTACTAAAAT GCTAAGCTTT GATTGTTTTT CAACTACTTC TTGAGAGTTT CTGCATGTAT GATAAGGGCA AGACATTACA
CTGAGGTATT GATGCTGATG AGCAGCAAGG CTCCTGGCT GGTGAAGGGA TACTGATTAG CACACCAATG TGCTGCTCTT
GAACACACAC CTCCACAAA TTACAAATTA TCTTCCA

SEQ ID NO:2172: (Length of Sequence = 381 Nucleotides)

GAAGAAGGCC CATGGAGCTA AGGCTCAGA ACACCAAAGT CTGGACTGTC TGAGGGCACA TGCTAATAAC AGGAGGCTGG
CAAAGTGGCC AGCTCCCATG CCTTTCATG CATTCTTCTT TACCTCCTGC TGCTGGGAA CATCTTCCA GGAGCAATCG
AGTCAACAGC ACCACAGACA CTGCTATTCC GTTGAGAAAA GTTTTATATG GAAACACATA CTGATCATGA ACACAATAAA
CAGGGAGGGA AGCTCGGGCT CAGCCAGGAA ACCTGCCACA AGGAAGATGT TTGGAAGTAT CCAGGAGTAG TGTCAAACAC
TAACACCATA TTTACAAGTC TAATTGGAA CCTGGGCCCT TTITAAGTGC AGGAGGAAGT T

SEQ ID NO:2173: (Length of Sequence = 351 Nucleotides)

GAAGTTCCGG GAGCGCCTGA AGGAGCTCGT GGTCCCCAAG CACGTCATGG ATGTTGTGGA CGAGGAGCTG AGCAAGCTGG
GCCTGCTGGA CAACCACTCC TCGGAGTTCA ATGTACCCG CAACTACCTA GACTGGCTCA CGTCCATCCC TTGGGGCAAG
TACAGCAACG AGAACCTGGA CCTNGCGCGG GCACAGGCAG TGCTGGAGGA AGACCACTAC GGCATNGAGG ACGTCAAGAA
ACGCATCTCG GAGTTCAITG CCGTTAGCCA GCTCCGCGGC TCCACCCAGG GCAAGATCCT CTGCTTCTAT GGGCCCCCT
GGCGTGGGTA AGACCAGCAT TGCTCTGGTC C

SEQ ID NO:2174: (Length of Sequence = 308 Nucleotides)

TCATTAAATA GCTTCTATGC CACACTCTGA TTAAGCCGAC TGAGGTCCCT GGGATCTGGG TCACTGGACC GAGCTGCTCG
CTCGGTGGCT CCACTGCCAG GTCCGGGCGC GCTCCCCACA GCCTCAGTT CTGGCCGAGA CAGGGCTTGA CATCCGCGCG
CTGCAGTCCC GGGGTGGCCG TCACCGTTCC ACGGCCAGNG ACTCTNCCTG CTCGTCCGGG AAGGCGATGT CGAAGATCTC
CCGGTAGTNT TCCACGAAGG TAACCTCCAG GGCCCTCGGT GATGAAGGCT TCCAGGTCTG AGAAGTCC

SEQ ID NO:2175: (Length of Sequence = 403 Nucleotides)

CTTGCCCAAG GGCTGAGCT GGTGGAGGCA GAGCAGGAGT TGGATCCAGG CCTGINTGAG GCATCCTGCC ACCTCCATCC
AGACCTGGAG CAATCCCTGA GAAGGTGGC TACCACCAGA GATGTGGCAG CTCTGGTCTC AGGAAGCATA GCCGGAGGAT
GTCCAGGCA ACCAAACAGC CATTTCATCAG TAAGGAGCCA GAGTNAAGGC TGCTAGTTCA GCCCCCGAA GGTGGTCCAG
GGCAGCCAG TNCAGAACTC AGCAGGAGCT CAGTTCCAAC TGAGCCTGAT TCACTCCAG TGTCACAAG GGACATCCTG

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CCCCGCCACC TCCAGCAGGA GCAGCTCAGT TTGTGGCTCT GGGAGCTCCG CTTTIGCAAA CCCAAAAAGG CTGTGCATTT
 GGAAGCCAAA CGCTCAGCAT GCGGCTGCCG AGTCTGGTTT TGTGGACAAA GCAAACTGTG GAATGGCTTC TCGGTGTCTG
 TATAAAGGGA CAAACGGTTG CATTACCCCT TTGTACTATA ACACCGCTTC TGCATTGGCC ATATCCGTTT TTAAACCTTT
 TTGTCTCCGG GGAACCTTC ATTGATTAT NATGTCTCT GATGA

SEQ ID NO:2164: (Length of Sequence = 296 Nucleotides)

ATGTTTGTAA ATCACTTCCT TTTCCTACAA TATTTCTAAT AAGAAAGCTT ATAACAGCAC TTTATTGACA CCCTGGGACC
 CCGGGCAGGG TCAGCAAGAC TCCCAGCTGG CATCAGACTG TGTCTGGCCT GCTGTGCCA TCCCTGAGGG GTGCAGGACA
 GAGCCCCATA GGCAGAGAG GCCTCCCTGG GACCAGAGGA GGATGCTGTG CAGCCAGGCC CATCCCCAGC ACTCGAGGCC
 TAGGAGGAGA GGTGGGCTCT GGCAGCGGT GINAGTGGC AGTGAGAAGC CAGGCC

SEQ ID NO:2165: (Length of Sequence = 310 Nucleotides)

GTTTTTGTAA TGTTTTCAA ATAATGTTTT TCTGTGTGTG TTTTTTINCT TTTTITGGAC AGGNTCTCAT TCCCATGCCC
 CAGGGTGGAG TGCAGTGGT CGATCTCAGC TCATCTCAGC CTGACTTCC CAGGTTGAGA TGAATCINCC ATCTCAGCCT
 CCCGAGTACC TGGGATTACA GGCACACACC ATCATGCCCG GCTAATTTTT TGTATTTTTA GCAGAGACGG GGTTTTGCCA
 TGTGACTCAG GCTGGTCTCG AACTCCTGGG CTCAAGAGAT CCGCTGCCT TGGCCTCCCA AAGTGTGGG

SEQ ID NO:2166: (Length of Sequence = 361 Nucleotides)

GATGGAACT GGAAAAAAA TAATTGTAA GCAACAATTT TAGATTTTTT TATGGAGGAT AGAGACATTT GAATCAGATA
 CCAAGAAATG TATAGTAATC ACTCAGATAG AAAGATGTCT AAAATGGATT TTAAATGGGA TOGGGGAAAG CAAGGTGCTG
 AACACATGC TGTACATACT ACTTATAAAT CAAAGCAAAC CACTAGCAAA CTGATGTGAG TACTAACACA GGTGGAAGTG
 GGATTGTGGC GGAGGGGAGA GGTAGTINAGG GTAGACTTAT TTGTACCAAT TTNATTTTTG ATATTTCTTT TATATACAGA
 TACATAAGTC TGTATATACA TGTATGTCCA ATTATCTCCT T

SEQ ID NO:2167: (Length of Sequence = 325 Nucleotides)

TCCTGGGCTG TGCTCTGTTT GAAGGGGGCG CCTGCTCCC CTCAGATCAG TCAGGAGGAA GATGACTAAG GGGAGGGATC
 CTCTGGGTGA TGGCCTCTTC CTCTCAGGG ACCTCTGACT GCTCTGGGCC AAAGAATCTC TTGTTTCTTC TCCGAGCCCC
 AGGCAGCGT GATTCAGCCC TGCCCAACCT GATTCTINATG ACTGCGGATG CTGTGACGGA CCCAAGGGGC AAATAGGGTC
 CCAGGGTCCA GGGAGGGGCG CCTGCTGAGC ACTTCCGCCC CTCACCCCTG CCAGCCCCCTG CCATGAGCTC TGGGCTGGGT
 CTCOG

SEQ ID NO:2168: (Length of Sequence = 348 Nucleotides)

GGAGAACCGT TCGCGGAGGA AAGGCGAACT AGTGTGGGA TGGCCACCAA CTGGGGGAGC CTCTTGACAG ATAAACAGCA
 GCTAGAGGAG CTGGCACGGC AGGCCGTGGA CCGGGCCCTG GCTGAGGGAG TATTGCTGAG GACCTCACAG GAGCCCACTT
 CCTCGGAGGT GGTGAGCTAT GCCCCATICA CGCTCTTCCC CTCACTGGTC CCCAGTCCCC TGCTGGAGCA AGCCTATGCT
 GTGCAGATGG ACITCAACCT GCTAGTGGAT GCTGTGAGCC AGAACNGNTG CCTTCTGGA GCAAANCTTT TTNCAGCACC
 ATCAAACAGG ATGACTTTTA CCGCTCGT

SEQ ID NO:2169: (Length of Sequence = 392 Nucleotides)

ATTTTGTGTA GGTCCAGTTT GGGTGGCAGA AACTAAGACA CTGAGCTGAT GAGAGAACTT GTTGCTTTTC GCCTGCGCA
 TTTATTTATT TATTATTTTA TTTATTTTGT TATTTTGTAGT AGAGACAGAG TTTCACCATG TTGGCCAGGC TGGTCTCAAA
 CTCTGACCT CAAATGATCC ACCACCTCG GCTCCCAA GTGCTGGGAT TACAAGTGTG AGCCACCATG CCGGCGCAC

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CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA
 GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC
 CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC
 CCTCTATCCC TCCCAGCACC TACTACATCG NCCTCACAT CCCTGATTCC TGTGTATTATG GAAACTNTTG CCAGAGATGG
 AGGTTCTCTC GGAGTATCTG GGAAGTGTGC C

SEQ ID NO:2158: (Length of Sequence = 280 Nucleotides)

CAGCTCCTGA GGACCGCTGC AGTGATGACA CAGGACTATT GCATCAGCAT CGTGCTCACA GGAATCAGA GCTCAGCCAG
 GAGAGGTCCA AGAATGACAG AACCATGAGC ACTCCTACCA AAACCTCAGT CTGCTCAGCC AAATCAACAA TTCAACCCAA
 CAGGCAACT CCTAACACAT CCCATCCAGA CAGACATTAG AGGCGCACAG CAGATGAACC TCCTACTTAC ACTGTCCAAG
 GAAGCTGGAC TATCAATTCC CAGTAAAAGT GGGGGAAAGG

SEQ ID NO:2159: (Length of Sequence = 342 Nucleotides)

CTTGTCGTT TCTCCTACCA GATTGTGCAT GCCTCCTGTG GGCAGAGCCT GTNCTGACTT GCTCCTGGGT CTCCAGCATC
 ACCCAGTCTG GAGCTGAGGA CCTGGGTACC TACAGATTTC CTTCCACACT GTCAGAATTG AGATGAAGGA AGCCAGAGA
 AATCAAGTAC CCTCCACCAG GCAGAGCAAA GTCCTGGGTG CCCAAAATCC AGGGAAGGCA AGGGCTGGGG GTACAAGCAG
 AGGATCTGAA GAGGTATATG AGAGTNGCCA GCACAGACCT GGCATAAGCT TGGTCTCAG TGAAGGTTAC CTGATGTTGC
 TGGGCACCAG GGGTGATGCA GT

SEQ ID NO:2160: (Length of Sequence = 376 Nucleotides)

ATCTTAAGAC ACATATGGAA AACAATAGGG TAGAAGCTAG TAACTACAA GAATATAAAT TGGAGCTAGA TGAAAAGGCA
 GTGCAGGCAG TAGAAAAATT AGAAGAAATC CATTACAGG TTAGTTTTT AAATCAGGTA AGTTTATCTG TAATGTGCTT
 TCATTATTT CACCGCAAAT TATATTTGG ATATGTATAT ATTATGTTTC CTCTGCCTCT CTTGTAGCAA TTTGCTTTGT
 AGAGTCTAG AAAAAAATG GCATCTGTTT TTCTTTTAA ATATTACAT TTCCATTATT ATTATAACAA AATCAATCTT
 TCAGAGTAAT GATTCTCACT GTGGAGTCAT TTGATGATTA AGATCCAGTT GGCATA

SEQ ID NO:2161: (Length of Sequence = 404 Nucleotides)

CCTTCCTCG GTTCAACTG GACTTCTATC AGGCTACTT CCTGGCCTG GCAGCTGATT GGCTTCAGGC CCCCTACCTC
 TATAACTCT ACCAGCATT CTACTTCCTG GAAGGTCAAA TTGCCATCCT CTATGCTGT GGCCTGCCT CTACAGTCCT
 CTTTGGCCTA GTGGCCTCCT CCCTGTGGA TTGGCTGGGT CGCAAGAATT CTTGTGTCCT CTTCTCCCTG ACTTACTCAC
 TATGCTGCTT AACCAAACTC TCTCAAGACT ACTTTGTGCT GCTAGTGGGG CGAGCACTTG GTGGGCTGTC CACAGCCTGG
 CTCTCTCAG CCTTCAGGN CTGGTATATC CATGAGCAG TGGAAAGGGC ATGACTTTCC CTGCTGAGTG GATCCAGCT
 AACC

SEQ ID NO:2162: (Length of Sequence = 339 Nucleotides)

CAC TGCCCTTT TTGTAGCTTG GGATCTAATT TGTAACACCT TGCTACCTAT GAAAAGTGGG AATGTAAAAG GGAAAAAGCA
 ACTTGCCATT TACTAACTT AGGCTAACCA AAACCTCTG TAGAGATCCT TACTAGACAT GGGTGCAACA GCAAGCATCC
 CAGAGGACCC ACCACTGGGG TATGTTTATG GCCAATGGAG CAAATTCAAA TTTGGCTAAA AGAAGAAGAA ACTCATTTAG
 TATGGCAATA ATATTTGCGT TCGACACAA GTGGCAAAACC AACACATTTG GCCTAAACAT GGTTCATAT GTTATAATGA
 TACTTTACAA TTAGACTTC

SEQ ID NO:2163: (Length of Sequence = 285 Nucleotides)

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SEQ ID NO:2151: (Length of Sequence = 369 Nucleotides)

GTGCGCCCA GTCCTTCTGA AACCTGATAT CACACTTCGG GCACTGTCCC CTCTACAGTC AATCTGTGTT TTCAGAAGTG
 GCCCCAGGTT CACTGTCTTT ACAGCAGTCC TAAAGAGCOG GCTGCCCTTT CCTAGGCTT CCTTGCTCTT NAGGGCTAAA
 TTCCAGCCCT CCTACCCAG TGCCACTTGG GTAAAAATAC TCTGCTCCTC TCAGTTTTC TAATAAGCCC GGGCTCCGAC
 TACCACCGTT CGGGGAAGG GAGCCCCCTA CGTCATTGC TGGGTCCGCT CCGGAAAAC ATGTGCCGGA CCTGACTTGT
 GCGGGGCGAT CTTTCCGAA ATGCCGTTT TGTTCCTTC TAAGGGTGT

SEQ ID NO:2152: (Length of Sequence = 312 Nucleotides)

TTCACAAACA AATTGTGGGA GAAACACACC TTCCAGCAA TAGAAAATCT CTATAAAGTG CATTTTCCT GCAACCATCT
 CTCCCATG CTGGCCCTG GGTGAGGATT TGAGGCACTG TTCGAGGGA GCCCTCAGG CCACCTGAGC TGGGAGAAGG
 GAGGCATGAA GCCACCATG AGCTCCAGC TACTGGACAT ACCCTCTCTA CCTGCCCTT CCTTNTGGC TCCAGGAGTG
 CACTGCCTGA CTCCACTGGC AGGTTGATCT GGAACGGC TNGCATGCT AGGGATGGT GAGAAGTAGG CG

SEQ ID NO:2153: (Length of Sequence = 325 Nucleotides)

CCCAGACCA GAATGTAAAT NAGGCCAAA TGCCACTTC CCAGGCTGAC ATAGAGACCG ACCCAGGTAT CTNTGAACCT
 GACGGTGCAA CTGCACAGC ATCAGCAGAT GGTCCAGG CTCAGAATCT GGAGTCCCG ACAATAATC GGGGCAAGAG
 GACCCGCAAG ATTAATAACT TGAATGTTGA AGAGAACAGC AGTGGGGAT CAGAGGCGG CCCCCTGGC TTGCAGGGAC
 CTGGNGTCT GCACCATTC CAGTGACCAC TTCAGAACC ACCTNGGNC ACCCCCAAT GTGCTCTGGC AGACGGCATT
 GGCTT

SEQ ID NO:2154: (Length of Sequence = 326 Nucleotides)

ATCATTTAAT TAACATCTT AAATGAAACA CAGTTTCTT CATGTCTC ACTCAGGCTT CAGGGCAGAG GGAATGGATT
 TTTAGACATA TCAAGACTC AAAAATTTAA AGAATATAT ATATGATAT ATATCTTCT AACATTTAT GGAAATTAAG
 AATCAGAGC TTTTGGTCTC TCCATTACT CTAGGTCAAG CTCATTTACC CCAGAGGACA AAGAAGGGCT GCCTCTCTA
 GACCCCTCCT TCTCCTTGT CCTNIGTCC ACCCAGCAG GAAACAAGCT CAGAAGGATC CTAACAGGAT AGAGTTTCCA
 GTAAAT

SEQ ID NO:2155: (Length of Sequence = 317 Nucleotides)

TGGATGAGGA GACCTGAAC ACACCTGCT ACTGNCAGCT GGAGCCAGG GCCTGTNACA TCCTGCTGGA CCAGCTGGGC
 ACCTACGTTT TCACGGGGA GTCTATTCC CGCTCAGCAG TCAAGCGCT CCAGCTGGC GTNTTGGCC CCGCCCTCTG
 CACCTCCCTG GAGTACAGC TCCGGGTCTA CTGCTGGAG GACAGCCTG TAGCACTGAA GGAGGTGCTG GAGCTGGAGC
 GGACTCTGGG CGGATCTTG GTGGAGGAGC CGAACCCTT AATGTTCAAG GACAGTTACC ACAACCTTGC GGGCTCT

SEQ ID NO:2156: (Length of Sequence = 372 Nucleotides)

CTCCAGCTG GCAGCCAGT GGCCACCCA TGTCAGCAC TTTCCAGTG GACTCTTCAG TGGCAGCAAG GCCACCTGAG
 GCCCTGINTC CCAGCCACTT TCCCTCTGG CACTGCCACC AGCCTCACCG AGTGGGCGA TCTGGCTCA CTGCAGCTC
 TGCCCTCCCG GTTCAAGCAA TINTCTGCC TCAGCTCCT GAGTAGCTGG GACTATAGCC GGTGCGGCC ATGCCAGCT
 AATTTTGTG TTTTGTAGT AGACAGGATT TAACATGTT GGCCAGGCTG GTCTTGATTT CCTGACCTCG TGATCCGTC
 TCCTCAGGCT TCCAAAATG CTGGGATTAT AGGCATGAGC CACCACAACC GG

SEQ ID NO:2157: (Length of Sequence = 351 Nucleotides)

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CACGGCGTGTG GTGCAGCCCC GCACGTAGAT GACATCCTGC AACTTGAAAC GCTCCTTGTC GATAGTTTTN TAGCCACACA
 TGGTGTGAC AACTTCTGTC GTGTTCTGA TGCAGCAGGT GTAGGGCACC CCACAGGCCA GGGGTCCAGG GGCAGTGCAG
 TCGTGGTACT GATTCTTGCT CCAATCTCGG TAGTCCT

SEQ ID NO:2145: (Length of Sequence = 420 Nucleotides)

CGCCAGGAGC TGCTAGCCAA AGCATTGGAG ACCCTACTGC TGAATGGAGT GCTAACCCTG GTGCTAGAGG AGGATGGAAC
 TGCAGTGGAC AGTGAGGACT TCTTCCAGCT GCTGGAGGAT GACACGTGCC TGATGGTGT GCAGTCTGGT CAGAGCTGGA
 GCCCTACAAG GAGTGGAGTG CTGTCATATG GCCTGGGACG GGAGAGGCC AAGCACAGCA AGGACATCGC CCGATTCAAC
 TTTGACGTGT ACAAGCAAAA CCTCGAGAC CTCTTTGGCA GCCTGAATGT CAAAGCCACA TTCTACGGGC TCTACTCTAT
 GAGTTGTGAC TTTCAGGAC TTGGCCCAA AGAAAGTACT CAGGGAGCTC CTTCGTTGG ACCTCCACAC TTCTGCAAGG
 CCTGGGCCAT ATGTGCTGG

SEQ ID NO:2146: (Length of Sequence = 390 Nucleotides)

CCCAAATACT GTTTCCTAAA CTATGTCGGG CGGCCGAAGC ACATGCGGGT NATGGCTGGA GCCCTGGAGG GGGACCTCTT
 CATCGGACCA AAAGCAGAGG AGCACCGGGG GCTGCTGACC ATCCGCTACC CCATGGAGCA CGGCGTGGTG CGAGACTNGA
 ACGACATGGA ACGCATCTNG CAGTACGTCT ACTCCAAGGT TCAGCTGCAG ACCTTCTCGG AGGAGCATCC TGTGCTCCTC
 ACGGAGGCC CGCTCAACCC GAGTAAGAAC CGGAGAAGG CGGCAGAGGT GTTCTTTGAG ACCTTCAACG TGCCGGCCCT
 GTTCATCTCC ATGCAGGCTG TTCTCAGTCT GTACGNAACA GGACGCACGA CAGGAGTGGT TCTAGACTCA

SEQ ID NO:2147: (Length of Sequence = 219 Nucleotides)

TTTGTGGTGTG GAGAGAACT GGTGTTCTGC CCGGCTCTGC TTGGTCACAG ACAGCTCCAG CAAGAGCAGT TGTAAAAGT
 GCCAAGCGTG TGTATCACTG TGACAAGCCG TTGCTTACT GCCCTGTTCC CTTCAGCCA AACCAGCTGA TGAAGAACTG
 CTGCCAGGNG GGTCTACAG CAGGTCACAA ATGACCTAGT TTCATTTTAA GCAGACAGA

SEQ ID NO:2148: (Length of Sequence = 353 Nucleotides)

GAAATCTTTA TTACAAAAT ATTTTGCAAG CAAAAAGTT TAAGTTGCAA CTATATACAA AATGGGCGCT GTTTCCTTCC
 CAGCAGTCTT AAAATAAACT CTTGAAACCA TGCTCCTTCC GCAGGTGGT TOGACCTCTT CCTTTCTCTG GGGTCAATA
 CACAAGGTAT GTGGATTCTC CAGGTGCCA GGCTAAAGCT AAAGCTATAC ATCTTCTTGG GCCTTATTC CTTATTTCCC
 CCTCCAAGAA TTAATAAATA AAATAAAATG AAAATGGCAC CAAGAAAACA TTCTTTTAAA ATACTGAATG TGTGTGTGCA
 TGCGTGTGCA CAGTATGTCC CTGTTCTCTG GGT

SEQ ID NO:2149: (Length of Sequence = 394 Nucleotides)

GGGAGACTT TGGGCTTTNN TCATGACTGT TTGGGTGGA GGTAGCTCAA GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT
 GTGTGTGTGT GTATGTGTGT AAAGTGCTAA GAACTGTGCA TTGACATCCA AACATTTCTT GTACAAAAT TCCCTAGCAA
 AGCAAACCTG CTTTGAATTA ATTTATTTGT TAAATGTTGC ACTTGTGTTA TGTATGTTTT GTTTTGGTG GGGAAATAAGG
 AGAGAGAGGA CGACAAATTC TATTGAAGTA TTTATTTTGT GAAGATGGCA ATTTTGCAAT TGTTTAAATA TTTTTCATTC
 NNITAATTTT GTTATCAGTG CCAGCCCAAN ATACCTGCTC TACCATTAAT TTGCGGGCCT GATAAAAAGG GTCC

SEQ ID NO:2150: (Length of Sequence = 200 Nucleotides)

ACCTCCCTGG GCCTCGGAGA CGCTGACAGC TGGGACGACA GCAGCTCGT CAGCAGCGGC ATCAGCGACA CCATAGACAA
 CCTCAGCACT GATGACATCA ACACCAGCTC CTCCATCAGC TCTTATGCCA ACACACCTGC CTCCTCTCGA AAAAACCTGG
 ATGTGCAGAC TGATGCTGAG AAGCACTCAC AGGTGGAGAG

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SEQ ID NO:2138: (Length of Sequence = 305 Nucleotides)

ATGCTGAGTC GCAGTTCOGA TGTTCTTATG CTTCCATCAG CAAATCTCAA TTTGTCAAGA TTCATGACAG ATTCTTCCCC
 AGCGTTTGGT TTAATTGGAG GGACTTTATC TCCAGGCTG CATGACTCTT CGATGCTCAG GGCACATGCC CGACCAAAGA
 CAACCAGGTC CAAGAGOGAG TTTNCCCCGA GCGGTTGGC ACCATGTACC GAGGCACAGG CGGCCTCCCC ACAGGOGTAC
 AGGCCGGGCA CAATCTGATC CTGGCCATTC ACGTGCTCA GGACCTGCCC CTGTAGTTG GTGGG

SEQ ID NO:2139: (Length of Sequence = 263 Nucleotides)

CGGCCCCAG CAACAGCTTC AGCCCTCTCC ACCAAGCTTG CCATCAAGGA GATTGCACCA CTGCACTCCA GCCTGGGTGA
 CAGAGTTAAG ACTCTCATGG GGACACTACT GTTCAAAAGG CCCTGGCCAA ATAACTCCCA AATGAAACAC TCAACCCAAG
 GATGTTTTCA GCCCACTGTT AGTGAAGCTG GGTGCAGAAT GCAAAGCCTC TAAAAGGAGA GGATACAAAG TCAGGTGAGT
 AGGGGCCATT GGCAATGCTC AGA

SEQ ID NO:2140: (Length of Sequence = 255 Nucleotides)

CTGCTTCANT CTGOGCCCT CAGCTGTGGC TTCCCGCAT GCCCTGTGAC CCCAAGCCGC AGGTACAGGA AAGAAGTTTG
 TGCTGGGGGA CTCAAAGACC CAGAGGTAA TTAACAGGAA CCAGGGCCAG GGGCCTTCAT CTAGAGGTCA GTGGAGTCTC
 CAGGGCACTC ATCACTGTGG CTGGGAGACT ACAGTGTCTC GGCTGCGGAC TTGTGGAAGA AGAGGGGGAA GGATGGGAGA
 AGGGGTGACT GGATG

SEQ ID NO:2141: (Length of Sequence = 355 Nucleotides)

TTTAATTAAA TACCACITCA TAATGTTATT TGCACCTAGT ACTTTTTTTT TTTTAAATAA GACATGCCAT AAGTCGTGAA
 GTTAACAAAA TATAAGCATC CGCACAGAAT ATATTCTAAG GTGACTTCAT TTACACOGCT TCTCAGAGAA ACACACAAGT
 AACCTTTTGT CTGCCTATCA GCCAGTGTG AAACAGCTTT GGAATTCACA TGAAGGCTG CCGGGCTGGT TCCCCAACAC
 TNGCCTGATG GAGTCCTGTA TCCGNACCGT GCGTCAAAC TGGCTGGTTT CCACTAGAAA AGCAATGGAG AGTCAGCTCT
 CCCTTCTTTA CCCAGCGTTC AACTCCACAC TGCAA

SEQ ID NO:2142: (Length of Sequence = 391 Nucleotides)

CTGCTAAGTG CCATGAGACC TTAGCAGAGG CTGTGGGTGC CCGCCCCAT TCCCTCCACT CACTCTTCTT TGCAGGTGGA
 CCTGCCCTTC TTGCTGAGG CCTTCTCTG CCTCCAGAGC CTGCTTGGTC CTCAGGCTGT AAGTGCAGGC AGAGCTAATG
 TCTCTCCATA GCTGCCCTCC ACCAGCCTGC TCTGAGACA CTTGCTGGCC AGCAGCCTGA AGCAGAATCC TTTACTCAGA
 TTCAGCCGCA CAGATGCTCA CTGCAGAGAT CTCCAAGGNC TGTGGTCATC CTGAGCCCA TCTCAGATT GTGTGGATAG
 GGTGTTAGAG AACATGGAAT CAGCTGGATA GAGTGGTICA TGCTGTAAAT NCCAGCACTT TTGGGAGGCT T

SEQ ID NO:2143: (Length of Sequence = 326 Nucleotides)

GATGCAGAAC AGCTTCTTGC AGAAGCACCT GCTCCGGCAT CCAGCGCTGC CTGGAGGCAG GAAGGAGAGG CAGGGCAGGA
 CAGCTGGTC TGAGATGAGG GGGAGCCCCA CGGGCCCCAG GCAGGCTAGA GGAGGCACAG GCCCTGCCAC GGCCAACTCA
 GGTGAGCCAG CTTGAGGCTG TGGCCTCCAA AGGGTCTGGG CGCACCCCCC AGGTGCGAGG TMTNTGAGGC CAGCCAACCT
 GCAGAGCACT CGCGGCTGG GTGGGCTGAG TGGAGGTGCC TGGGAAGCTG CCTAAATTCA GAAGCCTCCA CTTGCCATGG
 AGACTG

SEQ ID NO:2144: (Length of Sequence = 357 Nucleotides)

GCACCGGGCC CCAGGAGCCC ATCAGTGACA GAGTGCTCCA TGATGATGTC CTCCACCCGG GTGATGTACA GCAGGTCAN
 AGCACCCCCA GGAAGTGGGA NAGCAGGATG CCCAGGAGGA TGCCCGCCAT GATGGTGTAG TTGTCCATGA ACCAGATGAT

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SEQ ID NO:2131: (Length of Sequence = 280 Nucleotides)

CTGAGTCTTG TCGATCCCGA CCAGGAAGAG CAGCTCAGCC AGGAAGAGGT TGATGCACAG GTTCTTGTGG ATGGTGTGTC
 GGTCCGTCTG CAGCCCCCGC AGAAGCAGAA GGTGGAGATG CAGATGGCCA AGCAGACCAG GGAGATCACA ATGCCCCACC
 AGGTGATGAC CGACAGCAGC AGCTCGTTGA TGGGGCCCTG GTAGATCTCA CGGTGAGCCA TGAGCACAGC GAAGTTGGTG
 AGGTGGCTGC AGGCACACGT GGTATGGGTC TTGTGGACT

SEQ ID NO:2132: (Length of Sequence = 201 Nucleotides)

ATCCCCACAC CATGCTCTGC TCCTCCCATG GGGCTTTAGC TCCCCTGACC ATCTGCTCAT GTAGCCTCTG ACTGGGCGCA
 CAGTGGTGCA GGAGGAAGGA CCGGGAACCC TGTGTGGCTT TGGGCAAGCT GACAAACCCG TCTGGAATC AGTTTCCCCA
 GCTGTGAAAT GGGGCCAGTC CCCATGCCCT GCTGTCTCTC T

SEQ ID NO:2133: (Length of Sequence = 180 Nucleotides)

GATGAAAATG TTGTGACCAG AGGCTTGCCA TTNCCTAACT CTATTTGCCA GAGGAGCAAT AGTTCTGTAT TCGCTAATTT
 TGTGTTTACA GAGACTTTAA GGAACATGAC TGTGGGAAT AACAAGAATT AAAGGTATTT ATTTACTTNC TCTATATGAT
 TGTAATATTA TACCCATACT

SEQ ID NO:2134: (Length of Sequence = 302 Nucleotides)

ATGAACAAAC GGGACTATAT GAACACTTCG GTACAGGAGC CCCCTCTTGA CTACTCCTTC AGAAGCATCC ACGTCATTCA
 AGATCTGGTA AATGAGGAGC CAAGGACAGG ACTACGACCA CTGAAGCGTT CAAAGTCGGG GAAATCACTG ACCCAGTCCC
 TGTGGCTGAA TAACAATGTT CTCAATGATC TGAGAGACTT CAACCAGGTG GCCTTCACAGC TGTGGAGCA CCCAGAGAAC
 CTGGCCTGGT TCGACCTGTC CTTTAATGAC CTGACTTCCA TTGACCCTGT CCTAACAAC T

SEQ ID NO:2135: (Length of Sequence = 291 Nucleotides)

TCTTACCAAT CTGACATTCA CTATCAACCA CTCTTGACA CATGTCATAG AAAAGTGACA TCTCTTTCCC TTCAACCAAT
 ATATCTTCCA ACAACATCAA CCTCAACAGG TAGCTAGCAT TGCTCTCTGT TGAAATTTAG AGCTGGAAGA AAGGATTTCA
 CAATCTCTCT GTGGAGACCC AGGAATCCGT TACCTTCTGG GATTTTAGAG AGTGTGGAGA GAGATGAGCA GGCAGTGAGC
 CGGGGACCAA CTCGATAAG AATATGAAGT CAGGAAGTGA GAGAGGAAAC G

SEQ ID NO:2136: (Length of Sequence = 282 Nucleotides)

GCTGTACAAG GTCTTTTCTT TTGTGTGTCAT GGTGATTTT GTACATTTC GCATTTGCAT CATACAAAGG GGGGAGCAAC
 AGCCATGGCT TTTGGTCAGG TTCAGGGGGG CTGAGGGGGT GCTCCTCCCC TCCCCCAGG CACTGACACA TTGAAAGGAA
 GCAGAGCAAC AATGACACAG CACGGATGTG GGAAAGGGGA TCCCCACGC GGGCAGGATG GTCCATCTCA CCGGGGTCTC
 ACCAGGACTC CCGCTCCCCA CCCAGGGCCA GCACGAGCAC CT

SEQ ID NO:2137: (Length of Sequence = 322 Nucleotides)

GAATTGACAA CATATTGCCA AAATCTTAGT GGATTTTGCC AACACTATTC TGCTGATAGG AAAAAAGAAT CATTGAGCTA
 CTTTCCAATT TAGCCACAAA ATAGGCTCTT TTTCTTTCAT TACTACTTIA ACCAGTATGT TAATACTGAA AATAGGTATA
 AAGAAATCAC AAATAACCTT CTTCTGTTG AAGGAAATTT AAAATAGCAC ACTTAAATTG AAAGINAAGG GAACTTTAAT
 TCACTACTGT AATTTTAA TGTCTGTATC ATGTAGTGTT TGCACAGTTT TAACCTTAGT TTACCATCTC TTACTCCTTA
 GT

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TTGTTCCTT GCCTGGAGTG AAGTGGCGCC ATCATAGCTC ACTGCAGCNT CGCCCTCCTG GGCTCCAGCG ATCCTCCCGC
CTCAGTCTCC CGAGTAGCTG GGACCACCTG CGGATGCCG

SEQ ID NO:2124: (Length of Sequence = 233 Nucleotides)

GAAACGCGT GCATCTCTTG TCTGTGGCA GCGAGCACAT CGTNTGGAGA CACGAGTTTC TAAGCAGCTG GCACGAGGGC
TGCTGACGGC ATGGGTCTG CTTGAGGGTG GCAATACCTC TTAGGAACIT AGGGCAGGAA GCAATACITC AGCATTGAAT
GTGTGTAAAT AGTTGCTTTG AGTTGCAATT GCTATTINCT TCTCAGTCCC AGCTCAGATC GAATTATATA TCC

SEQ ID NO:2125: (Length of Sequence = 241 Nucleotides)

GCCATGGCTT TTGGTCAGGT TCAGGGGGGC TGAGGGGGTG CTCCTCCCTT CCCCCAGGC ACTGACACAT TGAAAGGAAG
CAGAGCAACA ATGACACAGC ACGGATGTGG GAAAGGGGAT CCCCCAGCG GGCAGGATGG TCCATCTCAC CGGGGTCTCA
CCAGGACTCC CCGCTCCAC CCAGGGCCAG CACGAGCACC TCCCGTTTTC TCCCCAGTGC AGAGCGTGGG GTGACAGGAG
T

SEQ ID NO:2126: (Length of Sequence = 275 Nucleotides)

GTGTGCCCTC TTGCTGTGTC TTAATTCATA AGGAGTTGTA TCTTCCCACC TGCATTTCAA TACTGCCGGT TAGGACCTAA
GTAGAAGAGC AGTAAAGGCT GATTGACACA CAGGGGGATG GAGTTGGTCC TTGTCCATTC TCTACCCCTT GCTGTGCATG
TATCAATCCT TATCCAGAA GGTACTATTT AGACTGTATA GACTGATTTA GATTACATAC TTAGAGGAT TAAGGAAACC
ATAGAGTTTG GGCCTTGGA CTGTACTGCT CTGT

SEQ ID NO:2127: (Length of Sequence = 296 Nucleotides)

TTCAGCCTTA TCGAAACACA TGAAGCAAAA CCATTGAAAC TGTATGTGTA CAACACAGAC ACTGATAACT GTCGAGAAGT
GATTATTACA CCAAAATCTG CATGGGGTGG AGAAGGCAGC CTAGGATGTG GCATTGGATA TGGTTATTG CATCGAATAC
CTACAGCCCC ATTTGAGGAA GGAAAGAAAA TTNTCTTCC AGGACAAATG GCTGGTACAC CTATTACACC TCTTAAAGAT
GGGTTTACAG AGGTCCAGCT GTCTCAGTT AATCCCCCGT CTTTGTACAC ACCAGG

SEQ ID NO:2128: (Length of Sequence = 322 Nucleotides)

GCATGGGAGG GAGGAAGAGA GGTITGGGGT GCGGTGGCAG GTGATATAGG GAAAGGGCTC ACGTTTCAGA ATCTGTGAAC
AATTCATTT TTCATCAGAT AGCAGAACAA CTACAACAGC AAAACCTAGA ACATCTCAGA CAGCAGCTCT TGGAGCAGCA
ACAGCCTCAA AAGGCCACTC CTCAGGATAG TCAGGAAGGA ACCTTTGGGT CAGAGCATTC AGCGTCACCA TCACAAGGGA
GTAGTCAGCA GCATTTTCTT GAACCTGAAG TCAATTTGGG ATGATTCCAT AGATATTAG CAACAGGATA TGGATATAGG
AT

SEQ ID NO:2129: (Length of Sequence = 222 Nucleotides)

TTTAGTGGGT CTGGGGTGGG CGCGGCCCCG GGCTAACGGG GCGGGTCTCC TCCTCTAGGC GCAGGAGTGC GCGGTGCTCT
CCAGGCCTCC CCGCTAGGT GGAGCGTGAC ACGCAAAGC ACACCGTCT ACCGAGGCGG GGCCAGGCG GCACCAGCCC
CTCCCCAGAT GGAAGTGCCC GGCAGACAGC TGCCCAAGAC CTCACAGAAC AAAGATGGAC AT

SEQ ID NO:2130: (Length of Sequence = 191 Nucleotides)

GTGGGATGCT TTATTTCACT GTGGCGGGGA GGGAACTGG ACAGGGGGCG GCAGGCGGGG TGGGNGGCTG GCACTCAGGC
GGGGACTAGG CAGGGGAAGG GCTGCCCCCA GGCTGTGTA GGAGAACTN AGGCCAGCCC TGGCGGAGAC CTAGCCACG
GGGGTAAGGA GGGTGGGGGA AAAGTGGGT T

SEQ ID NO:2116: (Length of Sequence = 153 Nucleotides)

AAGAAGCGAA GAGGATTTCGT GAGCTGGAGC AGCGCAANAC ACGGTGCTGG TGACAGAACT CAAAGCCAAG CTCCATGAGG
AGAAGATGAA GGAGCTGCAG GCTGTGAGGG AGAACCTTAT CAAGCAGCAC GNGCAGGAAA TGTCAAGGAC GGT

SEQ ID NO:2117: (Length of Sequence = 231 Nucleotides)

GAATATAATG TGTATCTNCA AGGTCGATC CACCCCTNCC CATCCTNTGG AGCTCAGAGA TTCTTGGGAG CTGAAGGTCT
TCTTAATGTC AGATCAGCAA CCCCAATCTC AGGCAGCTCG GATTCGCTGC TCTCGATCTN CCGCTGGCCA ATGTAAAACC
AGACGCAGGC GACCCAGTGC GCGACAGGGC GAACACGGCC ATGAGCAGTG TCAGCACCAC GCGCTGTAC T

SEQ ID NO:2118: (Length of Sequence = 309 Nucleotides)

CGGGAAGAA CAAATTGGAA TGGTGGGGGA TATGGGTGTG TGGTGGGGGC GGGGCAGGAG GTCCTCCGGG GTCCAGCATG
GGTCGGGAGT GGGAGCAGGA CAGAAGGTGG CCACTGCACA GGCGACTGAT GCTCAGCTCA AGGGGAGTGT GAAGAGGTG
GCAAAGAGCT GGGGAGCCGG GCAGAGGGAC AACACTGACT NAGGACATTN CAGTTGGGAA TCAGAAAAAA AGGGGCAGCT
CAGGGGCATC TGATCTGCCT CATTTTGA AAGAAACAG AGTAATGTAC AAAATTCTGG ATATCTTCT

SEQ ID NO:2119: (Length of Sequence = 308 Nucleotides)

GGTAATCGTT GAAGATTACC AAAGGTTTAT TTGGAATGAC ACAGCACTGA AAACATAATT GTTACAGATG ATTTGTGGAT
ACAGCATACA CCATCTATTT TACTTTAGAA CAATCTGTGA AGATGAGTTG CATAAATAGA AAGAGGTGGA AATATAGAGG
AGCTGTTTTT ATAGTGTCT TTTGGGGTA GATGAATATG CCCATCTTT CTACCCAATC TCATAAAGGC AGAAGAGAAG
ACTGCTTAGC TGCCCATCCC AACTAGCCTA CTTCCAGCCA CAGCGGCTGG ACAGCTAGAT AATCAGG

SEQ ID NO:2120: (Length of Sequence = 237 Nucleotides)

CGCTCTCCT GACGGGAGCC CACTAGGGGG TCTCTTTTCA TCTTTGGTGT GGCCTTACCT CCCACCAAAG AGATCCGAGG
CTTACTCTTC TCTCTCGGG ACCAGCATGA CCAGGAGTC CTTCAGGAG AGCTCTGTGA AGGAGCTGAG GCGGCTGGAG
GACCAGCTGG CCGGCCTGCA GCAGGAGCTG GCGGCTCTGG CACTGAAGCA GAGCTCGGTG GCGGAAGAAG TGGGCCT

SEQ ID NO:2121: (Length of Sequence = 224 Nucleotides)

GCGGTCAGAG GCTGAGGCCA GAGAGGTAGC AGCGGAACIN ACAGGGAGGC CAGGGGCAGA GCTGACCCTG GAGAGGGATC
CTNATGTCCT AGACACATGG TTTTNTCTG CCTGTTCCT CTTTNTGCC CTGGGCTGGC CCCAAGAGAC CCCAGACCTT
GCTCGTTTCT ACCCCCTGIN ANTTTTGAA ACGGSCAGCG ACCTTCTGCT GTTCTGGGTG GGCC

SEQ ID NO:2122: (Length of Sequence = 202 Nucleotides)

CAGCTGCAGC TTCCAACCAA GAAAACCTCA AAGCATTAGG GAAGGAGCAG GTGTGGGGCT GGGGTGGGGA GAATCCCTTA
AGCTCCAGGG CCCAGGGTCT AACCTGAGAG GTCGGGGCTG CAGGAAGCTG GGGGAGGCTC CCGGGGCTGG GGAAGAGGA
GCCTGCCCCC AGCAGAAACA GCAGGTCTCA GCGGCTACAT GT

SEQ ID NO:2123: (Length of Sequence = 359 Nucleotides)

ATTCTCTCT GTTCTCTTGA TGTGTAGGGA AATTGAAGA ATGACTCTGA TAAAAATCTA AAAGAGAAAC ATCGAATCCT
AACTGGCTGT GTGACCCTAA AACCTTACTC CGTCTCTTTG AACCTCAGAT TTCTCAGGGC TTGGCACATA GCAAGCATTT
CATACTCAGA AGCTGGTACT ATTACTGTG TGTTTTGTG GGGGAGGTTT GTTGTGTTTG TTGGAGACA GGATCTGGCT

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SEQ ID NO:2109: (Length of Sequence = 329 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA AOCCTCCTGG TTAGAAGACC
 TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTTAG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA
 CCTCTAACTC TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTACATGC CCCTGTGTTA
 GCTGTGAGGG ACAAGGCAGA GAAATAACTG CCCAAGTTCA GCTTCCCATTA ATGTTTGGGG GATGCTATGA CTCAACTTTG
 ATCTATTTT

SEQ ID NO:2110: (Length of Sequence = 271 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTTGG CCCAGGGCCA CCCTGCCCTG
 AGGTCCTTGT GTGGCCGCC TGGCTTGGCA GCCCTGCCCA CGCTGCCCC GCAAACAATG GTGTGTGCGT TTTTACAGCC
 CTTTTAGGA ACCCAATATG GGCATAAATG TAACACCTGT AGCGGGGCA GATCTCTGT ATGTNCAGT AACAAATTAT
 TTGTAATGTA TTTTTTAGA AATCTTAAAA T

SEQ ID NO:2111: (Length of Sequence = 315 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTINC NCCCAGGGCC ACCCTGCCCT
 GAGGTCTTGT GTGGCCGCC CTGGCTTGGC AGCCCTGCC ACCGTGCCCC CGCAAACAAT GTGTGTGCG TTTTACAGC
 CCTTTTAGG AACCCAATAT GGCATAAAT GTACACCTG TAGCGGGGC AGATTCTCTG TATGTNCAGT TAACAAATT
 TTTGTAATGT ATTTTTTAG AAATCTTAAA ATTGCCTTTG CACTGAAGTA TTTTCATAGC TGTTTATATC TCTTT

SEQ ID NO:2112: (Length of Sequence = 275 Nucleotides)

GCAAGANAGA CCAAACCTA ACCTGAGTTA CAAGAAACAA GACAGTAATG GCTATAAAGG GAGTGACCAG GAGCAACTGG
 GACACTCCTT TACCTCCCAT ATCCAATGTA TGTNTTTCAC AGAAAAACAA CAAAATTAAC AAATTCACAA AATACAACAG
 CTAGAATTAC AAAATCCATT CATCCAAGG TGGTAGAAGG CAGGATGNA AGGTGGAAGG GTAAATNGCA CAGGGAGAAA
 AACAAAGTGT TCCAATCAGT CCAGGCACAG GGAAT

SEQ ID NO:2113: (Length of Sequence = 227 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAAT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGGT AAGAGACAAC
 TCCAGTGCAG TGCCAGGTGG GCAGGCTCCC ACTGTTCACT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA
 CTGCGAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGT

SEQ ID NO:2114: (Length of Sequence = 339 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAAT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGGT AAGAGACAAC
 TCCAGTGCAG TGCCAGGTGG GCAGGCTCCC ACTGTTCACT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA
 CTCGCGAGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGTGGG GCAGGAGGGA
 AGGCCAGTTC GTNGGCAGGC TGAGGAGGGA ATATNACCCC CCTCAAGTCC CCAAAGTGGC AGGCAAGTTA AGGGGCCCTG
 GATGAGGTGG CCCCCTCATG

SEQ ID NO:2115: (Length of Sequence = 262 Nucleotides)

TGGAACACAA AATCCCTGT NTAAACATTG TACATTGGG GCTTAGCTGC CCTTGAGGAT GTCTAGTTA CACCCTCTCT
 GATACCTGTG GAGTTTAAAG ACCATTCCTA CCGCTGTGTC CCTTNGGAGG GGGTGCACTG GAAGCTCTTA AAGGGGAATG
 CTGCTCTGCT CTCGTGGCT TTTTGTGTTGG GAAAGGGAGT TNGGATTNGA GGATTTAGAT TTNAGGTCAT GATGTCAGAG
 CACACCAGGA ACTCCCAAGG CT

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TGGTGCCAC GCATAGACTT CCACAGAACT CTTCAAAGCA ATCACCAGAA ATTTGATTCT TTCATATTTT ACAACTTTAT
AAT

SEQ ID NO:2103: (Length of Sequence = 270 Nucleotides)

CTTTTCACTC CCCCGCCCTG GGCTCTGCT CTCCTGCCCTG GNTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT NTGACTNGGC
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG

SEQ ID NO:2104: (Length of Sequence = 367 Nucleotides)

CTTTTCACTC CCCCGCCCTG GGCTCTGCT CTCCTGCCCTG GNTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT GTGACTGGGC
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG TAAGGTACCC TTCCTTNCCT TGGATGCTGG TTTCAACCAT CTATATATGG
CATCCACGCA TGGGATCTGC AAGCTGGAGC CCTCCTACCC GCAGCTT

SEQ ID NO:2105: (Length of Sequence = 288 Nucleotides)

GCAAAATTAC TGAAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCTNTGGT GATCCAACAC CAGCCCTGCG TCGTGGGACT
TGCTTCANAT CAGCCTGCGA CTGCAAGATT CTACTGCAG TAGAGAACTC TTTTCTCTCC TTGTACTTTT TTTTGACCTG
GNATCTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTG

SEQ ID NO:2106: (Length of Sequence = 349 Nucleotides)

GCAAAATTAC TGAAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCTNTGGT GATCCAACAC CAGCCCTGCG TCGTGGGACT
TGCTTCAGAT CAGCCTGCGA CTGCAAGATT CTACTGCAG TAGAGAACTC TTTTCTCTCC TTGTACTTTT TTTTGACCTG
GCATCTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTGCA AGGAAAGCTG CCGTCTCTTT TGGCAGTCTT
GATGCAGAGC CTGCACTCTG GCACTCGCT

SEQ ID NO:2107: (Length of Sequence = 329 Nucleotides)

GTGACAAGCT CCAGAAGCCC GCTTCGCAAC ANCCAGGAGG GCCAGGCCAC TCCAGGCAGG AGGCAGTGGG CTGGCAGCCA
CCTTGGGCAC AGAAGAGCAG ACGCAGACAG TGCTGGGCAA CGAGGGGCTT TTTTCATGGG CCGCCTGCC CTGTCCCTCC
CCCCAGGTCC CCACCTTCTA GGGTTAAAGT GCAGCTGGGA GGGAGGAGGC AGGCAGAAAT NGGGAGCTAG AGAGAGCCCA
AGTGAACCTT GACTGTCCAC GCAAGTCCA TGCTCTCTC GTCTGGAGT TCCTCGAGGT TCAGCGAGCC CATCCCGCCT
AGGGCCTCT

SEQ ID NO:2108: (Length of Sequence = 261 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTAAG GCTCATGATT TAACTCTGT AGTCACTGCT GGCTTGGAAA
CCTCTAACTC TCTCTGCCTC TTGACAGTGT TCCTCAAGG GAGTCCATTA GCCAGGACTA GGTACATGC CCCTGTGTTA
GCTGTGAGGG ACAAGGCAGA G

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CTAGATATAA CTACCCITCT CTATTCCTCA CCTAAATCCT TATACTGCTG ATGACTTTGG AAAATAGTAC AGGGTTTTAC
 AGTCTAATCA TGACAATACA TCTCCAGGNT CCTTGAGCCA AATACATTCC TCAGAATACT TTTTTTAAAA AACTGAAATT
 GATTACTTGT ACTTTGTTCAT CACCAAAAAT ATCTGTAGCA AGACATACTG TTCTCAGCAT CCACCTTCAC CATCCTCACT
 ATTGTAACTC ACAGTAGACT ATGCCTCCTA CTTTACTGAA AAGATACAAA CCATTACCTA GCAATCATTC TTCCACCTTA
 AACATAT

SEQ ID NO:2097: (Length of Sequence = 296 Nucleotides)

CACCCITGCTG AGGTCAATTT CGTCAGTAT GCCTCGGGTC ACATAGGCCC TGATGACCCA GATTTTCACAC AGAGGTCACT
 ACATCGGTCA ACTTTCCTCC CAGGAGGGGC CGGGCTGGT GGGCCATGCC CACTCCGTGC CACATGCCA GCATTTCAGAG
 CTTTGTAAAG AAGCCCTGTT CTAAATGCTC AGGTCCACC CTTCTTGTG AAGAGAAGCC ATGGGCTTCC TGCTCCTGTG
 TCACAGTGTG CCACCTGAAG GGTGGCTCTT CCCCATCTT CTTCCATGGG GGCCAG

SEQ ID NO:2098: (Length of Sequence = 324 Nucleotides)

ATTGGTITIN TTGAGTGTG TCTTCITTTT NITGTITTC AACATACTTA CTGCGTATAA AGTCATGCAA AGAAAACAGT
 GCAGACAGTA GATCCTAGTG GATGTGCCA GGTATTCAC TCAGAGTCAA TCCAGGGAA AGAGGGAAAG AGGAAAGAA
 AGAGAGAATG CGAACCGAG GCTGCAGGAT GAGGCATGAA GAGTAGAAT TCCAGTGTG TTGCTGTGGT CATCAGACGC
 CAAGGGGAGA GAGGCAATNA AGACACACGC TCACGGGCC CCCAGAGGTG GGTGGGGGGT GCTGGGGGGC GGCACACAGA
 TATG

SEQ ID NO:2099: (Length of Sequence = 299 Nucleotides)

GAAACCGTCA GTAAGGAGCT CTTTATCTTT ACCTTCCAC TCACAACTA CTGCTAGCT GTTCTTATCA TTGCTCCTT
 TTTCTGTGC ACAAAATGT GTTCCATCTT AATGAACACA TTTCATTAT GTCTTCTTA ATGAAGGACA GTCCCTTTCC
 CTGTGCTGTG AATCCCATAG TAATGACATT AGCTTAAGTT TTCTGAGCAC TTGCTATCTG CCAGTTCTC CCATGAATTA
 TCTTGCTTAA GCTTTCAGT ATACCTGTGA AATAGGTGGC AGTAGTTGTC CCACCATAC

SEQ ID NO:2100: (Length of Sequence = 308 Nucleotides)

GGCAGCTTAT TTGGATGG TTACAATGT GGATCAACA GGAAATCTG TTATCATCAA CAAGACCAGC AGCACCAGAA
 TNINCCGAGT CTTCCAGCAG TGCAGGCTCC TCAGGNTCC TGTCCCGCAC CCATCCACT CTCCAGAGCA CACCCCTAGT
 CTCAGGTGTG GCAGCTGGCT CTCCAGGCTG TGTGCTTAT CCAGAGAATG GAATAGGGGG CCAGGTGTCT CCCAGCAGCA
 CCAGCTACAT CCTCCTTCCA CTGAAGCTG CAACAGGCAT CCCGCTGGG AAGCAATCCT TCTTTAAT

SEQ ID NO:2101: (Length of Sequence = 291 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT
 CATAGACTGA TCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGG TGATATGGCT
 TTGGNGCCCA CGCATAGGAC TTCCACAGAA CTTTTTCAA GGCAATCACC C

SEQ ID NO:2102: (Length of Sequence = 323 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT
 CATAGACTGA TCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGT GATATGGCTT

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GGGGCTATCA GCCATGGCGT GGTGGAGGTG GACCCCATGC TGACCCTGGA GGAGCAGCAG CTCGCGAAC TNCAGCGGCA
CGGCTATGAG AACCCCACTT ACCGCTTCCT GGAGGAACGA CCCTGACCCG G

SEQ ID NO:2090: (Length of Sequence = 293 Nucleotides)

TTATGTGGAA TACCACACGC CCTGGTACAT GGCTGAACTC TTCCCCTTCA TCCTGCTTGG GGTCTTCGGG GGCTTGTGGG
GAACCCCTCTT CATCCGCTGC AACATCGCCT GGTGCAGGAG GCGCAAGACC ACCAGGCTGG GGAAGTACCC GGTGCTGGAG
GTCAATTGTG TGACTGCCAT CACTGCCATC ATTGCCTACC CCAATCCCTA CACAGCCAG AGCACCAGCG AGCTCATTTT
TGAGCTGTTC AATGACTGTG GAGCCCTTGA GTCTTCCCAG CTCTGTGACT ACA

SEQ ID NO:2091: (Length of Sequence = 274 Nucleotides)

CTTTTGGAAAT GGTCAAACAA TTTAAGTCAA ATGTTTAAAT GGTCGAATTA AAATAAGGGT TCAAACATGT TTTCAATATA
TTAATTNCTT TAAAGTCATG TTCAGGCAAG GTGCTGTTTA AAAAACCCT ATTAGCTTIG TCCACACATG TAAGTTATCA
AAAGTACCA AGGTAATTTT GACGTTGAAT GCAGCTTTAA ACAATAAAAA AATGGTATTA GGTTFACCTC TCGAAGCAAA
GAGAGCCCC AACCTTGTA ACTAAACATT CTGA

SEQ ID NO:2092: (Length of Sequence = 290 Nucleotides)

GGTACGTAGG ACGCTGGCCC TGTCCTCCGG CCGGNTCTGG TCAGACACAA TCATGGTCTC CACCACGAGG TGTCGAATGC
CTGAGAGGGT GGTTCGCTCC AGGTCCAGGA GGGCAGATCC ATGGGCGATG GTCCTCCTGA GCTCCAGAAG GCTACGGAAG
GAGAGCGAGG CAACATGGGG CTTCCCCAG CGCTCCGTCT CCTCCTCCAC GTCCTCCTCA AACTTGATCC AGCGGGCCGT
CTCCCGCCAG TGGGGCTCCT GGCTGCGGTC CAGCATCAGC TCGTTCAGCT

SEQ ID NO:2093: (Length of Sequence = 323 Nucleotides)

AGCTACACTG ATACAAGTGG ACCTAAGAA ACGAGTTCCG CTACTCCGGG ACGAGACTCC AAAACCATCC AAAAGGGATC
AGAAAGTGGG CGTGGGAGGC AGAAATCTCC TGACACAGT GACAGCACAA CACAGAGAAG AACTGTAGGC AAAAAACAAC
CCAAAAAGGC TGAGAAGGCA GCTGCTGAAG AGCCTCGTGG AGGCCTGAAG ATAGAAAGTG AAACCCCTGT AGACTTGGCT
AGCAGCATGC CCTCCAGCAG ACACAAAGCA GCCACCAAAG GCTCAAGGAA ACCCAATATA AAGAAGGAGT CTAAGTCTTC
CCC

SEQ ID NO:2094: (Length of Sequence = 255 Nucleotides)

AAGGATGTTT TGGTTCCTTG CCTCAAGGCC GGCCATGTGG GAGTTGTATC TGTGGAGTTC ATTGCCCCAG CCTTGGAGGG
AACGTATACT TCCCATTTGC GTCTTTCTCA CAAAGGCCAG CAATTTGGGC CTCGGGTCTG GTGCAGTATC ATAGTAGATC
CTTTCCCCTC CGAAGAGAGC CCGATAACA TTGAAAAGGG CATGATCAGC TCAAGCAAAA CTGATGATCT CACCTGCCAG
CAAGAGGAAA CTTTT

SEQ ID NO:2095: (Length of Sequence = 305 Nucleotides)

GCACTCCAGC CTGGGCAACA AGAGCGAAAC TCCATCTCAA AAAACAAAG AAAGAACTN CTGAAGTCGG GGGCTGCTAG
AGGATTTTCA GGAAGGTGCA ACACAGGCCT CACTTCCAGT CCTCAITTC CCAGCTCACA GAGTCACCAG AGGGTGAGAA
GCAGAACGTG CCAGCAAAGA GGGAAAAGGC CACAGAACCA CCTTNTCTC AATTACAAAG GGGTGCAITT CAGAGGAGGG
AATAGGGATG GAGAGGAGGA GAAGACCTGC CCAGGAGCCA GATAAATCA AAGTACCAA GATGG

SEQ ID NO:2096: (Length of Sequence = 327 Nucleotides)

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SEQ ID NO:2083: (Length of Sequence = 257 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT
 GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCAOACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG
 GGGTCATTTT GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA
 ACTAGCTGCT AGGCTCT

SEQ ID NO:2084: (Length of Sequence = 255 Nucleotides)

TATTATACAG CATGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGGAAAACAC ATTTACAAGA AGCTGAACAA
 CTTGTATCAG AACATACATC AAGGTGAAGA GTTTCGGCCC TCTTGGTATA GGGTATGTAT GTGTACATCT CCAATTTTGA
 ACAATGATGA CATAAGNCT AATACTCTAT TTATTCAGGN GACCCATAA TCAGGATAAT AGTAGGCATT CAGAGTAATA
 AAGTGATCAC AGTTG

SEQ ID NO:2085: (Length of Sequence = 290 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAACTT TTTACTTAGC CTTTTTGGTT TGTGTCCCA
 CCCCCACCTC CTCACCCCTT TTCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCAGC GGCCCTGCA GCCCTGCTT
 CCAGCTCCA GCCTCACCTT TGTGCCAGA CTGCAATTG GAAGACTCCA CCTCCGCCC AGGCCTGGGC TGTGGGCGG
 TTGGAGATT AGGTTTAAAT CCACACAAGC CCCAGTGAGG GGTAAGCAT

SEQ ID NO:2086: (Length of Sequence = 342 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT
 GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCAOACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG
 GGGTCATTTT GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA
 ACTAGCTGCT AGGCTCTCTA TCTGGGAGA AGAAGGTGAA GGTTCCGCA TATCAATTTT CCAACTCAG CCAAGATTTT
 CCCAGCATCT NCAGGACAAG TG

SEQ ID NO:2087: (Length of Sequence = 306 Nucleotides)

TATTATACAG CATGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGAAAACACA TTTACAAGAA GCTGAACAAC
 TGTATCAGA ACATACATCA AGGTGAAGAG TTTCGGCCCT CTTGGTATAG GGTATGTATG GTTACATCTC CAATTTTGAA
 CAATGATGAC ATAAGNCTA ATACTCTATT TATTCAGGAG ACCCCATAAT CAGGATAATA GTAGGCATTG AGAGTAATAA
 AGTGATCACA GTTGAATGAA CGTGTTCACC AAAAGTCTTA GACCAACCTG ATATCATCTT AACTT

SEQ ID NO:2088: (Length of Sequence = 326 Nucleotides)

ATTGAATAAC TTAGGCAATC TTCCACTTTG ACTGAAATGA TTAAGATCAG TTTACCGAAA GTCATTTTCAT CCTTGCCTTG
 CAGGCATCTG GCTATTCTTG GTGCAGGCT GATGGGAGCA GGCATCGCC AAGTCTCCGT GGATAAGGGG CTAAAGACTA
 TACTTAAAGA TGCCACCCTC ACTGCGCTAG ACCGAGGACA GCAACAAGTG TTCAAAGGGT AAGCCTGCTC TCTCTCTTG
 CAAGAGTTAG AATGTCCTT GTTCTTGGT TAGTTGTTTT TTGTGGTGGC TTGGTGGTT TTTTGTGTTG TTGTCTCTG
 CCATCA

SEQ ID NO:2089: (Length of Sequence = 291 Nucleotides)

GGGTTTCCCT TTCCACTCAT CGGAGATTCA GAGGGATGAG CTGGCACCAG CTGGGACAGG GGTGTCCCGT GAGGCTGTAT
 CGGTCCTGCT GATCATGGGA GCGGGCGGAG GCTCCCTCAT CGTCTCTCC ATGCTGCTCC TGCGCAGGAA GAAGCCCTAC

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TACTTTCACT GTCACCTTCT CTCTACTGGA TAACAGGCCA AAAGTACTGG CACTCATCTT TCACTTTCTT CC

SEQ ID NO:2076: (Length of Sequence = 223 Nucleotides)

GTCACGAGGT CAGGAGATCA AGACCATCCT GGCTAACACA GTGAAACCTC ATCTCTGATC TATTCAGGGC TCINACTTCT
TCCITGGTTTA GTCITGGGTG GGTGTATGTG TCCAGAAATG TATTGATTTT TCTAGATTT CTAGTTTATT TNGTAGAGG
TGTTTATTCT CTGATGGTAG TTTGTATTTT TATGGGATCA ACGGTGATAT GCTCTTTATC ATT

SEQ ID NO:2077: (Length of Sequence = 323 Nucleotides)

GTCCCCCTTC CCCCTTTGTG AGACCAGGCT CTGTCTCAGG AACAGGCCCTG AGGGAGGAGG AGCCACGTTT CTCCTTCCTT
GGAGCCCTGA GGTGGCCAGG CTGTCCCCAC ATAAAGCATG ACATCCAGGT GCCAGCTGGC TAAGAAATGG AGCCTGAGGC
TGCAGCTCAC CACCTGTACC TCACAGATGT CCATTGAGAG GAAAGAAGGG TGCTCCAAAC GCCAGGCCCC CAAGGAGCAC
AGACTCAGGG TCCAGGCAGG TTCAGTGCTA GTAGGCAGGT GGGCACTGCT GTCCAGGAAA ACCTGGTGGG CAGCTGTTTT
CCC

SEQ ID NO:2078: (Length of Sequence = 310 Nucleotides)

AATTTCAGT TGTAAATCA AACCTACTGA CATTTATAGT CCCTTACTTT CTCTCTTTC TTCCATGTGA AATGTCGAA
ATGTCTACA GTCATCTTC CCACGTATT TTTAGGTTTT ACTCTCATAC TTCAATAATC ACTACCCCC TTTATTTCAA
TAAAGTTTT AAGTCAGTGC TGATTTTTTG GTAGCTCCCA TTTCTGATA TATTTGTCAT GTACATATGC AAGTGTATGT
AATGTAGGTG TGCATCTATA TATACCCACA TATACATATA TACATATACA TATATATGTC CATATACAGC

SEQ ID NO:2079: (Length of Sequence = 281 Nucleotides)

GAGACCTGCC AGAAGATTAA AAAAAAGAAT GAGAGAAAAG CCCAGTTAGT GGTGTGCAAA CTTACTTCCT TTAAATGTCC
CATGGATGTA GGACAGTGCC ATGTTTCAAG ATGCTGTGA GCTAGGTCTT CAAGATTAT AGAATGTTAC TTATGAACAA
AATATAATTA TTTATGGTAC AATCTTTGTA CTTTAGCAAA TCTGGAGTGA GTTCATAGTC AAAGTCAGTT AATATTTCTT
AGAGGAAAGT TTTGGCTTTT TGTGGCAACA TTTTATAGC T

SEQ ID NO:2080: (Length of Sequence = 311 Nucleotides)

ATTAAAAAGA ATATTATTTA TTATCTNCTT TATTAATACT CACATGTAAC CTTTGCTTTT TACACAAAAG TCTGCTTTAG
AAGAATGCCT CCNCGGCTTA TCATGCCCAA TGGGGCTTTT TGTTCTGGA CCACTTCCCC TTCTCCACC CCCACCCCA
CATCCAAATT ACTCTTAACTA TGTTACAGA TACCACGNAT ATTTGTAAA CAAGNTTTGG GTTACTGGAA CTGATTTCA
TTAACATCCC ACTTCAAAT GGAAGGCAGG TGGAGGGCAG GGTAAAGNAA TAGGGGGAAA GAGGGCAAGA G

SEQ ID NO:2081: (Length of Sequence = 207 Nucleotides)

GGACGCAGC TCGTGCCAT CACCGCTGGG TGGTTTTTTC CCCTTAACCT TTTACTTAGC CTMTTGGTT TGINTCCCA
CCCCACCTC CTCACCCCT TTCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCAGC GGCCCTGCA GCCCTGCT
CCAGCTCCA GCCTCACCTT TGTGCCAGA CTGCAATTG GAAGACT

SEQ ID NO:2082: (Length of Sequence = 260 Nucleotides)

TTAAAAAGAA GTGCATACTT ATTTGCAAGG AAAACAAATG GAATAGACAA AAATTTTAGA ATATAAAGAC TTTTINCAT
TTATGTATGT GTTACAATT CAAAATAATA AAGCTAGTTA AAAGTCAATA CATATTAGAT ATATTCAAAT ATTTINCAA
ATAAATTCG ATCTTATCAG TTAACACCCA TAGCAAAGA CTAAGGAGTA TTTGTATAAC ATTAGGGTAT TTGACCTCAT
ATTCTATTCA TTTGGGTTTA

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CCACCTGGCC CGAGTGGAG CTATGCTGAA TGACGGCGT CGGATGGCTC TNGAGAACTA CCTGGCTGCC TTGCANTATG
ACCCGCCACG GGCTNATCGN ATTCTNCAGG GCTT

SEQ ID NO:2069: (Length of Sequence = 321 Nucleotides)

GTGCCATCTG TTTACTTCTC AAATGAAAA GAATTCAGGT CTGAGTGTCC AGGAAAGGGG GTGAATTTCA TAACCGCCTG
TGACAGOGAT GGGGAGGAGC CACACCCCTC CAGAGGGTAC CACCAGCGG ACAAGTGGGG AGGAGGAAGT AGCTGGCATG
AAGCCGGCCC ACCCAACCTC CGGGAGAGAG GAAAAGGAGA ACACGGGATG AGGAGGCITT AAATAGTATT TCATAAAATA
AAAATGCCCA GCACTCTTAG GAACCTCTCA TTCAACCGCC TAGTTTTTGT TTAATAAATT CTAATGCCAG AGCTGGGGGG
C

SEQ ID NO:2070: (Length of Sequence = 161 Nucleotides)

AAAGCTGCAT AAAACAAGTT TAAITTCCAA CCAGGGTCAC AGTCATCGG TTATCCACA TTTTGAGCAA GGATAGAGAA
GGTGAGTTAT TAAACATATA CAGTCTACAT TCCAGAGGAG GAACTGCAGT TACCACTATA ACACCACAGA CAACTTTGG
G

SEQ ID NO:2071: (Length of Sequence = 288 Nucleotides)

GTGGAAGGGC CTTTCATCAT GCTTCCCATC TTCAGGAACA TCAGAGAATT CATACTGGGG AGAAACCATT CAAATGTGAT
ACATGTGGTA AGAACTTCCG TCGTAGATCA GCACCTAATA ATCATTGCAT GGTCCACACA GGAGAGAAAC CATACAAATG
TGAGGNCITG GTTAAAGTGT TCACTGTAG CTCAAACCTT CGTATCCATC AAAGGGTCCA CACAGGAGAG AAACCTTACA
AGTGTGAAGA ATGTGGTAAAG TGCTTTATTC AGCCTTCACA ATTTCAGG

SEQ ID NO:2072: (Length of Sequence = 284 Nucleotides)

TCCTGTCTTC AGACCCCTTT GCGTATTGT CCTCCTAAC TGGGACCTAA GCTAAGACTC AAGGGCTGCT CCCATGCCCT
TCAGTATCCC CCATAAAATC TAACTACACA TTAGAACTC AAAGAATAGC ATAGGCATGA TCCATCACCT GCAACAGAAG
CAGTGAGGAG ACTTAAGCCA GGGTTCCTNC AAGGATTNC ACCGACCNIT CCTGCATCTC TGNATGCCGG ACTCCTAAGC
ATTTACTCAG ATTTTAAACA GCACATAATG CCATGGCGAG GATG

SEQ ID NO:2073: (Length of Sequence = 270 Nucleotides)

GGAGCGATAC GCCCTGTGCG CGAAGGACCT GCGTCTAGA GATGTTGTGT CTGGTCCAT GACTCTGGAG ATCCGAGAAG
GAAGAGGCTG TGGCCCTGAG AAAGATCAG TCTACCTGCA GCTGCACCAC CTACCTCCAG AGCAGCTGGC CACGCGCCTG
CCTGGCATTN NANAGACAGC CATGATCTTC GCTGGCGTGG ACGTCAAGAA GGAGCGGATC CTTGTCTCTC CCACCGTGCA
TTATAACATG GGCGGCATTG CCACCAACTA

SEQ ID NO:2074: (Length of Sequence = 278 Nucleotides)

GCACATGCCA TCAGTCTCTG CTAATTTTTG TATTTTATG AGAGACGGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAT
CTCTGACCT CAGCTGATCT GCCCCTCTG GCTCCCAA GTGCTGCGAT TATAGACAGG AGCCACCGNC CCGACCCCTC
TCTCACTTCT CAAATCTCTT TCCTTTTCTC ACCTTCTAGG TGTCAAAGAC AGTGGATGGT CTCTGAGGTT CAAACCAAG
CTGACCGGGT AAGTATTTAC AGCAAGCAT CCAATGGG

SEQ ID NO:2075: (Length of Sequence = 232 Nucleotides)

GTCTCTAGGA TCACTCAA CCCAGGATCA CGGTTTGTGA ATGTATCAA GGCATGATT TGGATTTAG AGCTGGCCCA
GTGAACAACA AGCAATCAAG CATTCCTTTC TCTTCTTTC TCTCTCTCAC ATATACACAC ACACCTTTC TCTCTCAGT

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CTAAATCAA CCACATAATT GGACATAAAA GAATCTTCAG CAAATACAAA AGAACCAAAA TCATAACAAA CACACTCTAG
GGCCACTGCA CAATAAAAAT ACAAGTCAAG ACTAAGAAGA TCACTCAAAA CAATGCAATT ACATGGAAAT TAAGCAACAT
ACTCTCAAAA TGACTTTTGG GTAAATAATA AAATTAAGGC AGAAATAAAG AAGCTCTTTG AAATAATGA GAAGAAAGAT
ACAACGTATC AGAAACTCTG GGTACAGCT AAGGCAGTGA TAAGAGGAAA ATTCTTAGCA CTAATGCTC ACATTG

SEQ ID NO:2063: (Length of Sequence = 312 Nucleotides)

ATCCATGGCT TTAGCAAGAT CCCAGTGTG GAACTCTCCT AGCAACTTGT NTTCATCCAG TGATACTGGT TCTNTGGGGG
GCACTTACAG GCAGAAGTCC ATGCCCGAAG TGTTGGAGTG AGCGTAGAT CCCCAGCCTC CACTGACAGG CAGAACACCC
AGTCAGATAT TGGTGGCAGC GGAAATCCA CGCCTAGCTG GCAAAGAAGT GAGGATAGCA TTGCTGACCA GATGGCTTAC
AGTTATAGAG GACCTCAGGA TTTCAATTCT TTTGTCTCG AGCAGCATGA ATATACAGAG CCAACATGCC AT

SEQ ID NO:2064: (Length of Sequence = 294 Nucleotides)

TACCTAAAGA ATCTCAGAT GGGAGACCCA GCCAGTTTG NTCACAAAT AGCAGAAGTC AGCCAAAATA TAGAGAAAT
GCGAGTAGAG ACCCAGAAAT TTGAGGCCTG GCTGGCTGAG GTTGAAGGCC GGCTCCCAGC ACGCAGCAG CAGGGCGGCC
GGCAGAGCGG ACTGTACGAC AGCCAGAACC CACCACAGT CAACAACCTNC GNCCAGGACC GTGAGAGCCC AGATGGCAGT
TACACAGAGG AGCAGAGTCA GGAGAGTINAG ATGAAGGTG TGGCCACGGA TTTT

SEQ ID NO:2065: (Length of Sequence = 331 Nucleotides)

GAGCTGAGTT TCACCGTGTT GCCCAGGCTG GTCTCGAACT CCCGGTCTCA AGTGATCCTC CTACCTCAGC CTCCCAAAGC
ACTGGGATTA CAGGTGTAAA TCACTGTGCC CAACCTGCTC AAATCTTTGG AGAGAAGCAA GTCTTCTAGC TGAACGTGAT
AATGGCCTCA AAAGCAGTGT TGACAGCAGA TAATCTTCAC ACAGACAAAT GTCTACAGTT TCTAAATAAG CCAACTGTGC
ATATGGCCTA CAGGCTCTTC AGCATAACCT ACCCAAAGCT CAGGTTCCCT GAAGGCCAGG ACAGTACCTC GGGCCTTCAA
GCAGCATTTG G

SEQ ID NO:2066: (Length of Sequence = 321 Nucleotides)

GTCTTGANCT CTTGACCTCA GGTGATCCAC CACCTCGGC CTCCCAAAGT GCTGGGATTA CAGGGGTGAG CAACCGCACC
TGGCCTTGAA CCGTTTGAAG TATTGATGCA AAAACAAGTG GTCAGCTATG GCCAAATTG CAATTCAAAA AGATCCAAGA
AAGCAAGTTG AACATCCTGA TTGGAGATGG GACACACCCA AACGTGTGTC TTGAGGTGGC TGCAAAGTCC TCCGGTCTGA
GCCAGTNTAA GCAGGTTTTA CCCCAGCCCA TGATTTAGAG AGATGTTNAG TGCAGATCCT GAGCTCAGCA GAGAGCAACA
T

SEQ ID NO:2067: (Length of Sequence = 335 Nucleotides)

CTGGCTCTGT GGCTCAGGCT GGAATGCAGT GGGCGAGGT TGGCTCACTG CAACCTCCAC CTCTGATCT CAAGNCGTCC
TCCCACCTCA GCCTCTCAAG TAGCTGGAAC TACAGTGGA CTACAGGTGG ACAACATCAC ACCCAGCTAA TTTTNTNAT
TTTTTGTAGA GACGGGGTTT CACCTGTGTT CCCAGGCTGG TCTCAAACCT CTGAGCTCAA GCAATCTGCC CACCTAAGCC
TCTCAAAGTG CTGGCATTAC AGGCATGAGC CACCGTGCCT GGCCTGGGAA GCTCTTTTAA CAGAGGTGAT GTAAAGTAGA
AAAAGCAGTG GGCTC

SEQ ID NO:2068: (Length of Sequence = 274 Nucleotides)

GCAACCGAAT GGACAGGGTA AAGAAGGAAT GGAAGAGGC AGAGCTTCAA GCTAAGAACC TCCCCAAGC AGAGAGGCAG
ACTCTGATTC AGCACTTCCA AGCCATGGTT AAAGCTTTAG AGAAGGAAGC AGCCAGTGAG AAGCAGCAGC TNGTGGAGAC

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CTGCTCAGC CTCCCAAGTA GCTGGCATT CAGGCGCCCA CCACCACACC TGGCTAATTT TTGTATTTTT AGTAGAGAGC
 AGGTTTCACT ATGTTGGCCA GGCTGGTCTT GAATTTCTGA CCTTGTGATC CGCTTGCTC GGCCTCCCAA AGTGTGGGG
 ATTACAGGCG TGAGCACCAC GCCCGGCCAA CTTGCTTTTC TCTAATGGCT GCGATGTTA ATTTTTTCAC TGGCTTATTT
 ACCGTCCTCT TCTGTGGA

SEQ ID NO:2056: (Length of Sequence = 292 Nucleotides)

CTCTTGACTC CGAAGGCTGG TGACAGACAC ATAAGGCAGC TCAAATCTTT GCAACTTCCG TACAAAAGAA AAGGCTCCAT
 CCTCTTTTTT TCGAACTAAG AATAGACTAA AGTATCCAAT CAAGTCATCT GGAAGATCCA GCTTTGCAGC TACAGCCTCC
 AGGACATCCT CAGTCTGATC TGAAGTTAGC ACGTTGACCA GAATTTCTG CCCGTTGCTG AGCAGCACTT CCAAGGACAC
 TTCTCTGTG GGGACCTGCT GTGTCTCCTG TTGTGCCCCA CGCAGGAAAC TG

SEQ ID NO:2057: (Length of Sequence = 293 Nucleotides)

CCAAAAAAGT TGGGTGCTG AAGGTGGGGT TTGATCATG GCCAGGCTTC AAATTTAGGT CAGGCTCTGG TGGTACATCC
 TTATATGCTT GGTGCTCAGC ACAGGTCAAG ACACACAATA GACCTCAAT AAATATTGTC TGAATTGAA CAATTCCTGT
 AAAAATCTCA TTAAGAGACA TCAGCTTGGG ACACAGTTCC TCTCTTACTG TTCTTCTCC CAGAAGCTCC TGAATGAGC
 AGGTCTGGCG GCAGGGGGCA CACAGGGCTG CTGCTCAAAT CGGAGAATGG CAC

SEQ ID NO:2058: (Length of Sequence = 172 Nucleotides)

CTTCTACAGT CAAGGAGCTC AAGCTGCGG GCGACCTTG CTCTGCTC CCACATTAAT GCGGGCATCC TGGAGGATG
 ATATAGACCG GCGGCCATC CGGAGGTGC GCTCCAAGAG CGACANGCG TACCTGCAG AGGCCAGGT CTCTTTAAC
 CTGGGGGCG CT

SEQ ID NO:2059: (Length of Sequence = 245 Nucleotides)

GCAAGANGGC CGAGGGGGCC CAGAACCAGG GCAAGAAGGC CGAGGGTGCT CAGAACCAGG GCAAAAAGT AGAAGGGGCC
 CAGAACCAGG GCAAGANGGC TNAGGGGGCC CAGAACCAGG GCAAGANGGC CGAGGGGTCT CAGAACCAGG GCAAAAAGGC
 CGNGGGAGCC CAGAACCAGG GCCAAAAGG AGAGGGAGCC CAGANTCAGG GTAAAANGAC AGAAGGGGCT CAGGGCAAAA
 AGGCA

SEQ ID NO:2060: (Length of Sequence = 318 Nucleotides)

ATGCCCTGTT AAGGAGCTTG GCCTTGATCC TCTAGGCAGG GAGCCGTGG AGGATTTAAG CCAGGGAGTG CTGCGGTTGG
 TCACACTGCG CATTTATGTA GATCGTTTGG GCAGCCAGGG GAAGGATGGA TTINAGGGGG ATGAGATTAG AAAGCTGGGA
 TATGAGTTAG GAGGCTGAAA GATGGTTGAT AAAAATNATC GTTGGGCAGC CGAGATAACT GACTTCAAGG ACATATACTG
 GACTTATAGC AGAGCCTGTT GAGTCTTCTT TTGCACACA GTTCAAATAA TCACTTAGTC ATGTGGTTTA TCTTGCCA

SEQ ID NO:2061: (Length of Sequence = 331 Nucleotides)

AAAAATAAAA ATCTATAAAC TACGGATCAT AAGCAACTCC TGTTTCTGIG GGTTTCACCA CATCTCCAG AAAGTGAAGT
 TTTGCTCATA AAAATTACAT AGAATGTAAA CTAATTCATT TTTTAAAGTA AATGCAAAAC TAAGGGTTAC ACAAGCACTG
 AGCATCAACA CTGACAGAAT ATTAATCTG AAGCCCATTA ACTTTGACAA ACGTTTATTC ATCTTTGCCT TCTTGAAGCG
 TGTGACTATC CCAGTTTAC AGGAAAAGCT TAAACAGAAA AAGTTAATA ATAATCTCAA GGTTAGNAAA CTAAGACATA
 ATTTCTAGCT C

SEQ ID NO:2062: (Length of Sequence = 316 Nucleotides)

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ACTTTGTGTG TCTGATTTTA GGACTCTGGC TGGCCATGTG CTNNNGGTTG CCTCTCCTGC ATTTNCCACT GGATTTNCAC
TGCATCGTTT GGAGATACAA AGCGAGCAGT TCTTGGTCAG AACCCCTCCTC TGCTTTTCAT TGTGTTTGAT AATGGTTACT
GGGTCTTCT CTCAAGGGTA GCAAGGCCAA GCTGATGGCT GCTGTGTTAG GAGGCCATCA GTTCCTTCCT GTGGAGAAGG
G

SEQ ID NO:2049: (Length of Sequence = 269 Nucleotides)

ATTTTTAGTA GAGACAGGGT TTCACCATGT TGGCCAGGCT GGTCCTCAAC TCCTGGCCTC AAGTGAGCCA CCTGCTTTGG
CCTCCCAAAG TGTGAGATT ACAGGTGAGA TATTCTATAT TCATGGATTG AAAGACTCAA TATTGTTAAG ATGTCAGTNC
TTCTAAAGN GATTTTITAG ATGCAACACA ATTCCAATCA AAATCCCAGG NTTTTTTTGT AGCTATCAAT TGATAGATAT
CAACAGCCAG CTGATTCTCA AATTACGT

SEQ ID NO:2050: (Length of Sequence = 170 Nucleotides)

TTTTGAAGAG AACGTCAGTT TAATAAGCT AAATGGGGAG AATTGAAGTT TGCATTTGAC ATGGTATTAA ACAAACCAA
AGGGCTGAAA CTCATGTTTA GACAACACAG GTCAGTAGTC ACTAGGCAAA GAAAACAGTC CACAGCAGGT GGCACAAATA
ATTCTATAC

SEQ ID NO:2051: (Length of Sequence = 262 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCACAC GTGTCACCTG CAACATTCCT CCCACATCCA CATCCAGGAC
GGAGCCAAAT CTCATTTGTC ACCCTCAGTC ACCACCCAC AAGATGGAGC CGCTGGTTAC GACATGGATG ACAGGTGTCA
TGCACAGGGA GAGAATTTNT CCCCGGATAC CCTGAGGAC CAAGGACCAC CCCAGGCTA GGTGGGAGG ATTGAGAGCA
GTGCAAGAAA CCAAGGAGGA TN

SEQ ID NO:2052: (Length of Sequence = 325 Nucleotides)

GAAAAAGAT TGTTTTGTTA GAAAAAGCAA AAACAAAAA GCATTAGAAA GTGGGAGCCA CTGCACAGCA GTAGCCTAGA
GACTGGCTGC GATATGGTAG CTCTGCCTTG ATATCATCTT CGTGCTTCA GGCATAGAGA AATGGCAGAG GAGCAGTAAG
ACCCACAGG AGATGGCCAG AGGNTCCACC ATCAGCCTTC TGGGACTGA GGAGGTGATC TTAGTGAAT TATTTATAC
TCACCTCCCC CGGGGTTTAG TCCTTCTCC AAACACTTAG TTCCAGGGCG CAGGAGACCT GTTACTAGCA CTGTATGTTT
CTTG

SEQ ID NO:2053: (Length of Sequence = 222 Nucleotides)

TTTCAAAAT AGTCTTAAGA GTATAAGCTG TTTTNAGGG CTGTAGCCAG ACTACATAAT GAGCGGTGAA AGCGGCTGCC
TTCCCCCTCTC CTGACACCAG CAAGGGGGAG GCACCATCAC CGGCCCTGCC CCATCATGCA TCCAATGATT ACTAGCACTA
GANGCCAACG GCAAAGGNCC CCGCGGCTT GCTCGTGT TATCCAGGTT AAGCTATACA CG

SEQ ID NO:2054: (Length of Sequence = 341 Nucleotides)

GTAAATTAAG AATATGGCCC CAGAGTTTG TTTATCTGGG GTCGAGCAT AGATTTTATA TTCTCTGTG CGTTTTTTAA
ATCTAATTT CTGTCTCCAA TGGAGAGAGA ACAGGGAGGA TACAGAAGTA TTGCAGCCCA GATCCCTAT CAGGGGGACA
GCTGGTGGC AAAGCAGCCA CCCACAGCC TTGTGGCTAG AGTACAGTGG GGTGGACCCT CCAGCCCCAA TAGCCCTAGT
ACCCAGCTGG CAGGGTTGCC CACCCCTGCT GTCCACCTGC TCCATCCTCT AGGGGTTCCT CAGGCCCTG ACCGCACAGG
GAGGCTGGGG CCAGCCTGGT C

SEQ ID NO:2055: (Length of Sequence = 258 Nucleotides)

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GTTATGTGTG TTGAGATGG AGTTTCACIT TTNTTGCCCA GGCTGGAGTG CAGTAGCATG ATCTCAGCTC ACTGCAACCT
 CTGCTCTCCG GGCCCAAGCG AITCTCTCTC CTCAGCTCTC TGAATAGCTG GGACTACAGG TGCCCAACAG CACACCCGGC
 CAATTGTGTG ATTTCTAGTA GAGATGGGGC TTCTTCACGT TGGCCAGGCT GGCTCGAAC TCCTGACCCC AGGOGAITCC
 CCCACCTCAG CCTCCAAAAG CGCTAGGACC ACAGGCGTGA ACCACTGCGC CCAGTCGGAA GTAATAGTTA TTAACCAATG
 TGATGGCCCG GTGTAGGGAC CCTCGCTGT AATCCAGCA CTTTGGGAGG CCAAGGAGG AGGACCGCCC GNGACCAAGA
 GTT

SEQ ID NO:2043: (Length of Sequence = 331 Nucleotides)

CCCCCTACGG TGTGGCTCTC AGCAGCCTCA CCACAGGCAC CGCAGCTTTC CGCTGTGCA CCCAGCTGGG TGTGTGAATC
 CCCCCTGACT GCGCCAGGC CACCTTCATC TCCCATGACA AGATGGTCAT CTCCCTCAAG GGCAGTCAGA TCTACATGCT
 GACCTTCATC ACGATGGCA TGCGTAGGTT CCGAGTGTTC CACTTTTGAC AAGGCGGCCA CCAGCGTCTT CACCACCAGC
 ATGGTCACCA TGGAGCCTGG GTACCTGTTC CTGAGTCTT GCCTGGGCAA NTCTCTCTC CTCAAGTACA CCGAGAAGCT
 TCAGGAGCCC C

SEQ ID NO:2044: (Length of Sequence = 244 Nucleotides)

ATGGAAGATA CTAAGAGCCT CAGTCTGGAA GCATTTCCT AGGAAGCGCA TATAGACAGA GAAGATCAAG GACTGAGGCC
 TGAGACAGTC AGCACTTAAA GGGTGGGGG AGAAGTGCCA AGGAGACAAG GTGAGAACAG CAGAAGAGTA GCCAAGGCC
 AGGATGTTGC CACAGAAGCC AGGAGAGGTG AGCATGAAA CAGAGGAGGA CCAGCTGCTG GGACAGAAGA GCCATATGGA
 AGAG

SEQ ID NO:2045: (Length of Sequence = 333 Nucleotides)

GTCAGGGATT TGTCCATTCT GCTCTGGCC TCTCCTGAGG CTTCTAATG GGAGACCAA TCAAAATGT CCCATGTCAC
 TTGAGTGGGT AACTGCTTA CAGAACCTTG AGGTGACTC CTGCTTCAGT TCTCAGCTGT TTACCACAGC CCTCCAGGGT
 CCAAGATTG AGGAGCTTTC TCTTCTCTGG GAGGAAGTGT CTCANATTA GCTTGTGTGT GTTTTGGACA GAGGCTCCAC
 AGCGGTGGCT CTGAGGAAT CCTCACCAGT TTGTCCTCTT CCTCTGACA AGCAGCACCT GAGCAGATGC TGAGGCAGTT
 CATTAAACCA GGG

SEQ ID NO:2046: (Length of Sequence = 274 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTNA ACTGACTTAT TTGIGTATCC CACTAGAACA ATACATTAC AATATACTTG
 CAGAACTGTG CTTGGGTCAT CATGGGAGCA GAGAACTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AATCTCCCCC
 AAACCTTAAA GGCATCCTTT TCGTAGTGTG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA
 AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTT

SEQ ID NO:2047: (Length of Sequence = 327 Nucleotides)

GGCCGCGATG TGCTTTTNTC CTGINTGCG TGCCCGGGAT GCGGAATCTT GAGCCTGGT GTCCGGTTAC AGAGTTGTCC
 TGGTGACGGG ATGCGGAGGT TTCCTCCTTT TGTGTGTGGG GGCGGCTGGT GGCAGGGGCA GCTGGTGGCA GGGTGTCCCA
 CGCTAATCTC CGAGTCTCTA AGGGCACCGT CTTTCTGGA TCCCTCTTGC GCCTCGTCCA TAAAGGCAGA CCCGCGGGCG
 CGCGCCGGCA ACCTGAAATC AGAGCAGGCG TCCGTGGCGC TCAGGAACCT TGCTGAGCTT CGCGATCTT TCATTGTTGC
 TTCATTT

SEQ ID NO:2048: (Length of Sequence = 241 Nucleotides)

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SEQ ID NO:2035: (Length of Sequence = 290 Nucleotides)

CTTTTCCTTC ATCTGAACAC AGAAGGAGCC ACGGTCTGGA AAGTNTGCCT GTCCTTCCCG GGAGTGGGGA GGCCGGTGTG
AGTTTTGATC TTCCAGCTCA GGCAGACACC TTACACAGTG CAAACAAGAG CCGTGTCAAG ATGAGAGGGA AGCGTAGACC
GCAGACCCGT GCAGCTAGGC GGCTGGCTGC TCAGGAGTCC AGCGAGGCTG AGGACATGAG CGTCCCCAGA GGACCCATTT
GCACANTGGG CTGATGGCGC CATTTCCTCCA AATNGCCATC GGCACCAGCT

SEQ ID NO:2036: (Length of Sequence = 241 Nucleotides)

TTATTTTATA TAAAAAGTGT TTCTGTGATT CTCCAGAGCC CAGGAGTCAG TNCTGGTGGT TGGAGGGACC TGCCCCCACT
GGTTCATTTA ACCCTCTGTC TCGGTGCCCT NAGAACCTCA GCCAGAAAGG CAAGGAGGAA ATCAGAGCAN GAGCCTCATA
CTCTGGTGA TCTATTCAIT CINTGACCTC AGGGGTCACA TATAAGGTCA GTGTTTCTCG TCCCCGNCAG ATCTGCACTG
C

SEQ ID NO:2037: (Length of Sequence = 270 Nucleotides)

CTATTATTTT GCATTTTGG TAGAAGGGT GGTCTACCA TGTCGCCAG GCCGGTCTCG AACTCCTGAG CTCAAGCGGT
CCACCTGCCT CAGCCTCCCA AAGTGTCTGC ATTACAGGCT TGAGCCACTG CACCCTGCCC AACCTTGACT ACTTCTAATA
GGGATGAGTC GAGTAGCAGT TNGGGCGTC CTGTGCGGCT GGGTCTGCCT GAGGCTCCCC TCGGCCCGT CCATGGCTTG
TRGTGCATCT GGCCCTGAGT GCCTTGSCCC

SEQ ID NO:2038: (Length of Sequence = 151 Nucleotides)

ATTTTAAATT GAGCATTAAAG GGAATGCAGC ATTTAAATCA GAACTCTGCC AATGCTTTTN TCTAGAGGCG TGTTGCCATT
TTTTTITAT ATGAAATNC TGTCCCAAGA AAGGCAGGAT TACATCTTTT TTTTTTTTTT TAGCAGTTTG G

SEQ ID NO:2039: (Length of Sequence = 166 Nucleotides)

TTGTCTGTT ACAACCTCCG TATGACGCCA CGCCACCCGC TGTTACGTC CCGTCGGCCT CCTGCACAGN CCACACGCTG
CGCCCGGAAG GCCCTGCTG TGGAGAAGCC GGACCCATCC CCGAGGTCCC CAGCGAGGAC ACANACTCCA CGAGAGCAGC
CCCTCC

SEQ ID NO:2040: (Length of Sequence = 362 Nucleotides)

GAAGTACGGT TAAATTAGA TTGACCATA TGGAAGATCT TTTACCAGTT GGTCTCCAAG AATGTCTTCC TTATTATGTT
ATTGGTCATT TTGAGCGTG TGTGTGGTG GGGTGGTTC TGCCCTATAT TCCTTAAC TAATTGTATAT TTTTGTAAAG
AATTGGGAAT TCATTTTAAT GCTTTTAAAC ATCTTCACTG GGAAGTGGAA TAAAGTTATT CTGACTCTG TACCTTGAGC
CATGTCAAA GTCAGGGGT ACATTTTAGG TATCTAAAAA TTACTCTTTA ACTTTCACAT TCCCTGGGT AGGAAGCTGC
TGTTCAAGAG AAATTTTCCN GGTCTCTG GCAATTGGCT TA

SEQ ID NO:2041: (Length of Sequence = 360 Nucleotides)

CCTAATTGTA AGTATGAAG TCGAGGAGGT GCGTGATAAT GGGCCAAGTG AGGATGCAAT GCACCAGGTG TATAAGTAGC
TGCACTCACT CCAGCTTCAA TTCCAGTTC CCAGGCAGAC CTCTCTGGAG CCTGTGAGG ATGTNAGGAC ATAGTCTGAG
GCACATGAAT ATGATGCCCA TGACCATAGT TTGGGTGCAT CCTATGTGGA TGGGGTGGG GCGTTCATG TGCCCGCNTT
GGATGCTGCA TCATCCTCCT CCTTTGAACT TCCATCCTCT GCATCACTTC ATGAGGATGC AGTCTCTGTN CTGGAGGTGC
TGTGGCTGGA ATATGGTGG AAATTGGCTG GTGTGTAGGA

SEQ ID NO:2042: (Length of Sequence = 403 Nucleotides)

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AAATTTNTTA CAGGAATAAA TGAGATAGGA TTTTCAAGGG TATTINCTAT TAGGATTTAA TAAACAAAG TGATCTTTAG
AGAAACAAAT CTCCCATCA ACATGCTATA CT

SEQ ID NO:2029: (Length of Sequence = 261 Nucleotides)

ATTTCIACTA AAANTACAAA AAATTAGCCA GCGTGGTGG TTGTGCACCT ATAATCCCA CTACTCGGA GGCTGAAGCA
GGACAATTGC TTGAACCCAG GAGGTGGAGG CTGCAGTGG CTGAGATGC ACCATTGCAC TCCACCTTGG GCAACAAGAG
GGAAACTCCG TCTCAAAAA ACAAAACAAA ACAAAACAAA AACAAAAGTC AAGTGCTTAC ATTTTGCCAG AAGCCACAAA
TGAAGACTGT GCCTTATAGG C

SEQ ID NO:2030: (Length of Sequence = 384 Nucleotides)

NNCCNNGGAC CAACAGCAGC CAGAGCAGTT AGCCAGTTAG TCCCCAGGCC TGTGGCAGAG GCGTTTCTGA CCTGCTGGGC
CGAGAATGGG TAAGTTGTCT GGAGTCAGGT GGGCCACGT AGGACAGGT CACAAAGCCT GGGTTTGTCT CTGGGTACTT
TGCGCCTCTG GGTGCTAGA GGTGGGGCAT GGTGGCTGGA AGTAAACTG CCAACTCTGG CCTCAGAAC TCTCAGGTAT
AGAAGCCCA GATGTCTAAT ACCCTNTCCC AGTGCCCGAG AGCTGCCCTGG TGTGAGGTAG AGAGGACACT GTACCTGGGT
GAATGATCAG ACCCTGGTAG CTAAGAAGN ACTTGTCCCT TTAGTCAGTT TGCAGANCCC CTTT

SEQ ID NO:2031: (Length of Sequence = 261 Nucleotides)

ATCACAGAGG AGAAGCCACT GTTGCCAGGA CAGACGCTG AGGCGGCCAA GGAGGCTGAG TTAGCTGCCC GANTCCTCCT
GGACCAGGA CAGACTCACT CTGTGGAGAC ACCATACGGC TCINTCACTT TCACGTCTA TGGCACCCCC AAACCCAAAC
GCCAGCGAT CCTTACCTAC CAGGATGTTG GACTCACTA TAAATCTGC TTCCAGCCAC TGTTTCAGTT CGAGGACATG
CAGGAAATCA TTCAGAACTT T

SEQ ID NO:2032: (Length of Sequence = 344 Nucleotides)

CCCCTGCAG GCGTCTGGTT CTTGGGGGAA AACGCTCACC CACCCCTGGT AAAGGGCCTG CAGATCGAGC ATCCCGGGCC
CCACCTCGAC CAGCAGCAC CACAAGCCAG GTCACCCAG CAGAGGAAA GGATGGACAC AGCCCCATGT CCAAGGCCT
AGTCAATGGA CTCAAGGCAG GACCAATGGC CTTGAGTTCC AAGGGCAGCT CTGGTGCCCC TGATATATGT GNTCTCGCCT
ACATCCCGAA TCATTGCAGT GGCAAGACTG CTGACCTTGA CTTCTCCGT CGAGTGGTG CATCCTACTA TGTGGTCAGT
GGGAATGACC CTGCCAATGG CGAG

SEQ ID NO:2033: (Length of Sequence = 373 Nucleotides)

GGAAGAAAGA AAGAAAGAAA GAAAGAAAGA AAGAAATGG CCCCATAGTG CTTAAGTCCT CAGACATGTG TCCTGGTGCT
GGGGACAGGG CTTCTGACAT TCTCTCAGGT CAGTATTTC AGGTATCCA CCTTCGACTT CAACACATGT GACCAGAAAC
CTTCCAAGG CAGCCATCCA CTTTGTGTG CCTCCGACG CCATGGCTGA CCACTGCTGC TGCTGTGTAT CCTCGGTGAC
ATCTGGCCTT GGCAGCCTAT GGATTINTGC CATTCTCCTG GCATGAAATC ACTCCTTCTT GTTGTTTAA TTTGCATTTT
TTCAGTTACC AGCGCAGTTG AGCATCTTT CATACTTA CTGACCATTT CTA

SEQ ID NO:2034: (Length of Sequence = 289 Nucleotides)

CCACCAAAGA ACATCAGCT GTCTTATGTC AAATGCTCGA CAATACCTCT CAGTAGGACG TTGTTGCAAG GCTAGCTAAT
TTTAAATCTG GTATGAGTAA TACAGTCAA CCTAGTTAGT ATGCGAGAAA GTCGTTGCTA ACGCATGGTG AGAGGATGTG
ACGTACAGC ATGAGCAGTC CCTGGTTGTC CCATTGTGAG ATAAACGTAG TNNAGTAGNT CCAAGTTTCT ATTCCAGGTC
TCTGAACCCC AAAGCCAGGC CTTTCACTTT TGCTGGGTGG CCTGGAAGC

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CCACGCGGCT NGTAGTGCAG CCTTCTGTGA CCCCGCTNTG GTAAGTCCAG CCTTTCAGG GCTGCTGAGG GCTGCCTCTT
GACAGTGCAG TCTTATCGAG ACCCAACGCG TCAATCTGCT CATCCNTAAA GTGGGGGATA

SEQ ID NO:2022: (Length of Sequence = 223 Nucleotides)

GGTCACACAG CTAGTTGGTA GAGGAGCTCT TCCATAAGAT AGCAAGGCCA CATCACCTGC AGGGCAGTGC CTGCNCTGGG
AGGTGGCACA ATGTGCCAAG TGATGACGAT GACAATAACT ATGAAAGGAT TTTATATTTG CACAGCATTT GGTTCCTGA
TCTTCGATGA GGAAGAGCTC CTGCCGATGT CTGCTGAATT GTGCACTAAA ATATTTCAGGA TGG

SEQ ID NO:2023: (Length of Sequence = 294 Nucleotides)

TATTCCTAAG TTGCACTTT ACAAACCAC AAGGGAGAAG TCCTTGAAGG GGAGACAGGG GTAGGGGATT AGGGAGTGGG
GGATGGTAAA GAGGGGAAGA GGAAGACCA GAAACGAAGT CCCCTCCAAC CCCATCTCGG GGACCAAGCA GAGACTAGGC
CTCAGGCTAG CCCAGCAGGG TTCCTGTGTC CTGGTTGTAC AGAGCTAGGC CAAAAGACCT CAGGGGAAGG GCCATGGCCC
TCTAGAGACT GCGCCATTT GAGGGACAGC CACAGGCCAA TGTTTCCTGT GCCC

SEQ ID NO:2024: (Length of Sequence = 234 Nucleotides)

ATTTTGTGCG GGTGCAAAC GTCTTCCTGC CTTGAGCTGG GAGCTTCACC AGGCTTCGGT GTAGCGGACG TCCACTTCCT
TCAAATTGGG AAGCTTGGCC TTCAGATCTT CGTAGGTGTC AGCTGAGAGC TTNGTGTGT TCATGTTTAA ACTGCAGAGA
CTCTTCATGG AGCTCAGGGC CAGCAGGCCA GCGTCTGTAA CCGGGGTCTC GCACAGGTTC AGCACCTGGA GCAT

SEQ ID NO:2025: (Length of Sequence = 327 Nucleotides)

AGGAACAAAT GTTAAAGGGT AAGATAATTT CCCTGCAAAA GGACACAGAA GGCACTCTTA AGAAGATGAA TGGATGAGAG
AAGGGAGAGA ATAAAATGCA ATAACGAGCC AGCATTTACT ATGTATTTNN TCCTCACCTG TCTCTCCATA TTTAGGTCAC
TTACCAGTTT CTGTGCCCTT TTGGAGCTTT TMTTGAGGGC TTCACTCTCA CCCTGTATTT CTTTAGCCCT AAATTGACAC
TCTCTCAAA AATCCATTCC ATTGTCTGTG GACCNAGATG TTCTATGTAA TTCAGAAGCA GAACTCTTGG CTAAAGGGCT
AGTGTTGG

SEQ ID NO:2026: (Length of Sequence = 328 Nucleotides)

TCAGTATAAA TTTAAAAGAA ACAGCTTAAT GAAATACAAG TCAGTTTATT TGATATTTCAG CCTACAGCTT TCCAAAGCAG
CAGTTGAACA TGTGTTGAG TTTATACCAT TCATTCACTC ATTTATTTTT NCTTCTTTC TTTAGAAAA TACTGGGTGT
TTGATATTTG TTTCACTGTG CTAGTTTCTG GGAATGTGTA AGGAAGAGGC TGGCTGTGTG GATGAGAGCA ACTTGCTTTT
TACAATAATT ATTGTTATT GTAAATTAAAC AATTGTCTCT TCTGGTATTA TATGGAAGTA TTTGATCCNG TTGATGGCAC
TGCCTTTG

SEQ ID NO:2027: (Length of Sequence = 307 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGGTG GAGGGTNCN TTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTGTGAGA GGTGAGTCTT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGNCC
TCCTGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCTCTC GTGATAC

SEQ ID NO:2028: (Length of Sequence = 272 Nucleotides)

ATCCATTCTT GCATTAACT AGAGTTAAAA AGGAATATTG TTTATTGTTT GGCTCTCCCC ACTAGAAGTT TCACAGNGC
ACAGATCATA TCTACCATTT GAACAGCTCT CTGCTGATG GCTAATACAT TTNTTGGCAT ATAGTAGGTA GGTGCTCAAT

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NCACCACTTA TTGTCCTCAA ACATTATTGC ACTTTAATT TCTTAATTG ACAAAGCATT CAAGAAACAT CTGCAGACTA
GTTTAAACAG ACAAATAACA CCTGTAAGCA GACATGACTG TCCTAAATTG TTTATTAAGA AAGTTAAAGN GCAATAATGT
TTGAAGACAA TAAGTGGTG

SEQ ID NO:2016: (Length of Sequence = 293 Nucleotides)

TTTTCCTTCC CCAGAGATGC TTTATTACAT GGTTTCATCA GTCATCAATG ATGGGTCCCT ATGCCCATGC GAGGAGACAG
GAACATCTGT GTGGTACATG GCACTGTTC CCTCTCAGCT ACGCAGTCAG ATGGGGGCAG GGGGATGAAT GGGTGCTTGG
CTTCCCTGCT GTTGGGCAGG CTCTGAGATC TCAGCAGACA GAAATGAAAG CCTGGCAAAT AGGGAGGCAG GAATGTTCAA
GCATCGGTGA CCTCCATGTT CTGCAGCCTG TTTTCTAGGG TGACGTCTCT TTG

SEQ ID NO:2017: (Length of Sequence = 504 Nucleotides)

CGCGTGCTGG CGCGCTGTG GCGCGCTGC TNGCGNCCC CAGNCTCCTC GTGCGCCTGG ATATCTGTTC CAAAAACCCC
TGCCACAACG GTGGTTTATG CGAGGAGATT TCCCAAGAAG TGCGAGGAGA TGTCTTCCCC TCGTACACCT GCACGTGCCT
TAAGGGCTAC GCGGGCAACC ACTGTGAGAC GAAATGTGTC GAGCCACTGG GCATGGAGAA TGGGAACATT GCCAACTCAC
AGATGCGCGC CTCATCTGTG CGTGTGACCT TCTTNGGNTT GCAGCATTGG GTCCCGGAGC TGGCCCGCCT GAACCGCGCA
GGCATGGTCA ATGCTGGACA ACCAGCATCA ATGACGATAA CCCCTGGTTC CAGGTGAAAT TNCNCGGAG GGATNTGGGT
AACANNINTT GTTACGAAGG GTGCCANCOG TTTGGCCAGT ATTGGTACCT AAAGGCTTTA AAGGTGGCCT ANAGCTTAAT
TGENAGGATN CENITINTCC ATGT

SEQ ID NO:2018: (Length of Sequence = 354 Nucleotides)

AGANCAGACC CACAGGCATG CAGAAAGGTA GGGCAGTATG TTTAANTCCA GACTTGGCAC ATGGCTAGGG ATACTGCTCA
CTAGCTGTGG AGGTCCCTCAG GAGTGGAGAG AATGAGTAGG AGGGCAGAAG CTTCATTTT TTTCTTCTCT AAGACCCTGT
TATTTGINTT ATTTCTGCCC TTTCOGAGTC CTGCAGTGGG CTGCCCTGTA CCTGAACTT CATGAGCCTC TAAGGGAAAG
GAGGAACAAT TAGGACGTGG CAATGAGACC TGGCAGGGCA GAGTACAAGC CCAGCACCCA GTGTCCAGN CTTACTGGGT
CCTTANCTG GGCCAAACAG GGAGGGCTGA TACC

SEQ ID NO:2019: (Length of Sequence = 295 Nucleotides)

GACACAACCT TTGAACATAT TGCTGCTGTT TTCATTTTAA AAAGGAACTT TTAATACTAA AATTATAGGA AGAACATAAT
ATCTGACGTC ACGTAAATTC AGATTTGAAG GAAATTTACT TTTTINCCCT ATTTGINCTT ATTTTCTCTC ATTTTGTTAA
GAACCAGCGA ACACITTTGAA GAAAGCCAAA AGTTTACATC TGGAGCTGGA GGGTTCGTG ACTGCACACC AGGCACTCTG
CCAGCCCTAC TTTGCGCTGT AGTCCTGCAG GTCACTTGCC AGAGGTGGTA CTTTC

SEQ ID NO:2020: (Length of Sequence = 217 Nucleotides)

ATTGGAACIT AAGTTTCACA AGGAAAGTGG TCACCTTAGT TCACCACITT CCTTGTGAAA CTTAAGTTCC AATGGGAGAA
TGACAGTAAA CAGACAACTA TTATAATANG TCCATGGAAG ATTTTGGTGT ATGTNAGATT TNCAATCTG TAGAGAAACN
TNGGCTCATT CAATAAAAAT TTGAAACCA TTGATTAAAT TCCTAATAAC TATATGT

SEQ ID NO:2021: (Length of Sequence = 380 Nucleotides)

TTTTTCTTA AAACAACAGC AAGTGATCT TGGCTGTCTG TCATGTGTG AAGTCCATGG TTGGGTCTTG TGAAGTCTGA
GGTTTAAACAG TTTGTGTGCC TGGNGGGATT TTCTTACAGC GAAGACTTGA GTTCTCCAA GTCCCAGAAC CCCAAGAATG
GGCAAGAAGG ATCAGGTCAG CCACTCCCTG GAGACACAGC CTCTGGCTG GGGACTGACT TGGCCATGTT CTCAGCTGAG

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GCTGCCAGGG ACAGATCCAT AAAANTCCAA AAAGGGAAGA GAGAAACAGC TTGAGTACAG CTGAATCATT CACAACAATA
TTACAAGCAA TTACITCAAT GTAAAGTCT CCACTCTAGA

SEQ ID NO:2009: (Length of Sequence = 411 Nucleotides)

ATTACGGGCA CCGGCCACCA CGCCTGGCTA GTTTTGTAT TTTTAGTAGA GACGATGTTT CACCATGTTG ACCAGGCTGG
TCTCGAAGTC TTGACCTCAA GTGATCCACT CGCTTCGGCC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC ACCTGTGCCC
AGCCTCACAG CTGCATCTTA ACCTTACCTT TGCTCTGCC TCTCAAGCTG GTACCTCCTA ATTTACATCC TAAGAGTGGA
ACCATGTGAC AAGGACTGGA GTGCCATTGG CTGTGGACTG TTCAGGCAGG GAAGTACAAG ACCACTCTTG TATTGAGGGG
CAACCAAAGG AGAGAATTAC GTACTGTGTG AGTACAACT GCACCAAGCC CTGGAGACCC ATTACCACCG TTAACCTCA
ATACAGCTCT G

SEQ ID NO:2010: (Length of Sequence = 311 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CAGCGCGGTG GAGGGTNCCT NTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTTGTGAGA GGTGAGTCTT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGCCC
TCCTCGTGGC CAGTIGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCCTCG TGATACAACG T

SEQ ID NO:2011: (Length of Sequence = 192 Nucleotides)

TCAGGACATT TCAGTGAGGC CACCTACAAG CAGAAAGGAG GCCCAGGGCT AGGGACAGAN TGGCCCCAGA GCCAGTCAGC
TGCAGCAATT CTTGTGAGAA AGGGAGGGCA AGCTGCCAGA GCANTGTNGC CCAATATGAT GCCTACACGA GACAGATGTC
CCAGTAGAG TGTGTTCACT GACCTTCTAA AC

SEQ ID NO:2012: (Length of Sequence = 367 Nucleotides)

GGATGACCTT CGAGGACGTG TGCCGGTACT TCACGGACAT CATCAAGTGC CGCGTGATCA ACACATCCCA CCGTGGATC
CACAAGAGCT GGGAGGAGGC CCGGCTGCAT GCGGCTGGA CGCTGCATGA GGACCCGCGA CAGAACCGCG GTGGCGGCTG
CATCAACCAC AAGGACACCT TCTTCCAGAA CCCACAGTAC ATCTTGAAG TCAAGAAGCC AGAAGATGAA GTCTGTATCT
GCATCCAGCA GCGGCCAAAG CGGTCTACGC GCGGGAGGG CAAGGGTGAG AACCTGGNCA TTGGCTTTGA CATCTACAAG
GTGGAGGAGA ACCGCCAGTA CCGCATGCAC AGCCTTCAGC ACAAGGC

SEQ ID NO:2013: (Length of Sequence = 213 Nucleotides)

GATTTTATGG AAAAAAATTT CCATTTTNNI TAAGAAATAA GGAGTTTNTG TGTCGAGGGC ATGACTACGA GAGGCTGGAA
GCTTCCAACA GAGAATGCTG AACGANTTCC CCCATGCCAT CGCCATGCAG CACGCAACC AGCCCGATGA GACCATCTTC
CAGGCAGAAG CTCAGTATTT GCAGATATAT GCTGTGACTC CCATTCCAGA GAG

SEQ ID NO:2014: (Length of Sequence = 333 Nucleotides)

GTAAATAAA ACAGCAAATT CTAAATACA TTATGAGTAA AGAAAGATTA AAATAAGGNA ACAGTACTTA CTGTGCAACT
TTAAATTATA CCAAGTAAAG TACACCACCT ATTCACTGAT AACATTTTCC CTACGTTGAA AACACAAAAC CTACTTATCG
ATATTTTGA TATTAAAAA AAGGACATTC ACTATTGTAG CCTGACAAC TCTTCCAGTA TTTTAAACCA TTCAGATGTA
TTATGTGGGN ATATTATTA ACATAATTIN GTTAACACA TTCTTTCTA CACAACTGA ATTTTAAAG TGTCTATAAC
ATTTTCAATT ACA

SEQ ID NO:2015: (Length of Sequence = 179 Nucleotides)

SEQ ID NO:2002: (Length of Sequence = 242 Nucleotides)

AGCCAGGCCC TGGGCCCAAG CCCCTTGTC CTCTCCACT GCCCCCTTT CCAGACAGTA AAGGCCATGG TCAGTGTGT
TTCTCTTGT AAACAACCC CAGCTTGTT AACAGAAATG CTAATAACCT ACTGGGAAAG ATGGAGGTCT AAATTACCTC
CAGGGTTTT CTGGGGGTT ATCACCAGTG TGGGTCCCT CTGATACCAC CAGGTTCACT CCAGGCAGAG TGGGGCGGAA
GG

SEQ ID NO:2003: (Length of Sequence = 328 Nucleotides)

ATATTCTCAC TTATAAGTGG GAGCTAAATN ATGGGAACAC ATGGACGCAT AGAAGGNCAC ACTTTTACAC TNCCTGGTGG
NGTGTAACT AATACAACCA CTGTGGAAAA CAGTGTGGCG NTTOGTAAA GAACTAAAAG TAGATCTCCC GNTTGATCCA
GCAATCCAC TACTGGGTAT CTACCCNNA GAAAATAAGT CATTATACAA AAAAGATACT TGCACACAG TTTATAGCAG
CACAATTGCA AATTGCAAAA AATATGGGCG CAACCCAAAT GCCCATCAAT CAATGAGTGG ATAAAGGAAA TGTGAGATAT
ATATATAT

SEQ ID NO:2004: (Length of Sequence = 211 Nucleotides)

AGCCTTTTAA TTATGTNTT TTTTTTTTT TAANCGAAGG TCCTTACTG GTCTGCTTC CATGAGTAGC CGTGACCAGG
GGAAAAGGGA GAGGAACCA CCGGCACAGG GAGGGGTCT CTCCACAACA TTCCATTAT ACACAGAACT AAACAGACAA
GCACAGTTC ACTATTGGG TTAGAAGTGG GCAGCATGG AAGGGGGAGG A

SEQ ID NO:2005: (Length of Sequence = 241 Nucleotides)

CCGGGACACC GTGGGAAGG GGTGCAGGT GGGTGATGC CAGAGGAATG ATGGGCTTT NTCTGAGGG GTGTCCGAGA
GGCTGGTGA TGCAGTCTC ACGACCCCA TGTGGATCT TTCTCCCTT CTCTCTCTT TTTCTCTTC ACATCTCCC
CATAGCACCC TGCCCTCATG GGACCTGCC TCCTCAGCC GTACGCCATC AGCCATGGCC CTCCAGTGC CTCTAGGCC
C

SEQ ID NO:2006: (Length of Sequence = 266 Nucleotides)

TTCCCCCTAA CTTGTGAGT GGGCTTTTA AGTAGTAAGT AGTATACACC TAGATATGGA TAGATAGCTA GGTGACCAAA
CCTAATGGAT TAAGGCCATC CTCGCTAGG TCACCTACTA AAGATCAGGT CATATGTCT ATGTTTCTG TGCTTTTATG
AAGTATTTG GGAATGGGT CCAGATTTT TTTAAACACA TATTAAAGAT TATTATATT ATGCTTTGT TCGAAAGGT
TTTAAGGTGG ATTAAATAT AAGATT

SEQ ID NO:2007: (Length of Sequence = 419 Nucleotides)

AGAAAGAGGC TTCCTCTGC GGAGCAGGT GGAGCACAGG GAGGGCTCT GGGAGGCACA GGAGTGGGT GGGGCCAGG
AAGGGGGAGG TGGACAGAGC GACTTGGATA AGGCTGGCC GGGCCACGC CCACCTCAAG AGGGGGGCG CCTCTCAGG
AGGNATCAAG GTGCAATCCA GTCTTCTTT CTCTCCCTGA AGACCTGAGT TCCAGCCTTC ACAGAGCGTC ATGCGCATTC
TTCTTCTGG ATGCTAACCC CAAATCCGAC ACTCAATGGT GCACCTCAGG TACCTGCCAA GGTCTCTTGG GCCCAGATGG
AAGGTGCAGG GTCTGGGTCC CTGGATGAGC AGGTGAGGG CAGATGGGTG ACCAGGGAAG GGCATGACCC AGAGCTNCCG
GGACTCATGG AGGATTGG

SEQ ID NO:2008: (Length of Sequence = 360 Nucleotides)

CTTTTCTGGA GAAATAATA CGCTCGTTC TCTAATTAGC CCATCGGTTT CAGGTCATC ACTCTGCTAT CTCTCTCTG
AGTTTACACA AGCCCTTCAG AGTGTAAACA CGATGTGGA TTCAATCCCA CTCATTATTT TTTTCAATAA AAAGAGAACT
GTTTCAACAG ACAGGTGTG TTTCCGACAT CATCAGAGAG GAAGGTGGAT GGTCTATAC GGTAAAGCAT CTACCTTCA

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CTCGCCAGCC TCAGGCTGCT GCGCTCTCTC GGCTTTTACG GACCTCTGAG GCGAAACCC CACCTCGAAG TTTCCCCGTG
ACAGTGCGTC CGAGTCCACA T

SEQ ID NO:1996: (Length of Sequence = 316 Nucleotides)

GCATATGTTT GGTGAACAGT TTTGCAGCCC TAGGCTCCTG TACTGTGCGT GCACCGCCGC CCGGCAGCC GCTGGCTCCA
GCTCACGAAA CAGCCCCGGG CGCGCGCGG CTCTGAGTCC AGCCTCCTAC TGAGAACAGT CCTCCCTTG TGCGGGTGGC
ACGGCTAGCC GCAGGTTCCG CCACGTCAAA TCATTTTTNT AAAAAAGCAG GGAGCAGAGC TCTCTCTTCG CCGCCGACGC
AGAAAGGAGC TNGGGAGGAA AAAGCTGCTG CCTTTTGCGC TGGAGATTG TGGCAAGGC TTCTCATTTT CCCAGG

SEQ ID NO:1997: (Length of Sequence = 320 Nucleotides)

GCAGGTTTAT GTTTTATTTT ATGTATTTTA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG
CAGAACTGTG CCTGGNGCAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGNGTAA AATCTCCCC
AAACCCTAAA GGCATCCTTT TCGTAGTGTG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA
AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTTATTAAG GTGCACANCC ATGTCTGAGC CCCAGCTCTC TCCGCTCTCT

SEQ ID NO:1998: (Length of Sequence = 395 Nucleotides)

TTTGATGCTA TGGCGCTGGA CCCAGGGCCC TCCAGGCCA TCTCTGTCC TCTGGGGTGG TCCAGTTCTA GAGTGGGAGA
AAGGGAGTCA GCGCATTTGG GAATCGTGGT TCCAGTCTGG TTGCAGAATC TGCACATTG CCAAGAAAT TTCCCTGTTT
GGAAAGTTTG CCCCAGCTTT CCGGGGCACA CCACCTTTTG TCCCAAGTGT CTGCCGGTGC ACCAATCTGC CTGCCACACA
TTGACCAAGC CAGACCCGGT TCACCCAGCT CGAGGATCCC AGTTTGAAGA GTGGCCCTT GAGGCCCTGG AAAGACCAAT
CACTGGACTT CTTCCCTTGA GAGTCAGAGG TCANCCGTGA TTCTGCCCTGC AACTTATCAT TGATCTGCAG TGATT

SEQ ID NO:1999: (Length of Sequence = 337 Nucleotides)

GAAAGTATTT GTGTGATTGA GTCACAGCT GAATCAATCT TCATATAATG CCATTTTTCG TTAAAAGAAT GCCAGACTTG
GGCATTAGGC TGACATTTTC TTGAAAACAG TGAGGCTTTG CTTTAGGGAA AATAGTGGTA GTATTTATGG TCGATGATAA
AGTTCTAGA TTTTAAAGCA AAATTTTAGA AAGCTTGTAT CAGCTGCTGT AAGTATATAA TGAATCTGT CATTTATTGA
TTATCTGCAT AACTGAGTCA GTATTTCCAA ATGATCAATG CATAGTATTA TAAAATCAT ACATGGGTAA GAAATCTTTA
CAAAGTGTC GCTAGAC

SEQ ID NO:2000: (Length of Sequence = 329 Nucleotides)

ATGTAGCCCC CTGCTGCAAA GGTGCCATCT TTTTNCCTGCT GCTCACACAG CAGCGTGCTC AGGGCCTGCC TGCATGGCAG
NNTCATCATG GGAAGCCCA CAGCCACTGA CATCATGAAG CCCACACGGA GCATCTCGT CACCAGGTG GAGGGAAAGT
GCATGAGCAC GTTTGCGCGC CGTGGCCTCG GTGAAGCTGA CGTAGCCGAA AAACCCACC ATGACGTAGG AAGGTGGTGA
CCACATTAG GGAGGAAGCA AATATGGAGC TCATGGTTT CACTTGACGG GTCATCCAG GCTGTCTAG GTGGGCAGCA
CCTGGGACT

SEQ ID NO:2001: (Length of Sequence = 308 Nucleotides)

AAGTCTGGGG TTTGGTAGGC TCCAGGATT TCCCTCAGCA GGCAATTTTG CTGCCGAGG GCGTCTGGG TGCCCCGAG
GTCTCTCTGG ATGCTCTGTA GCTGCGGTG GAACGACTCC CTCACTGACT GTGTGGCAA GCTGAGCTCT GCCCTGACCC
ATGTGGCAAT GGCCAGGATG GGGGCCANGC CCTGTGGGAT GCTTTGCTGC CCGTNTCTG AGGCACCGAC TGCCCTCTCT
CCCAGTGTCC CCAAGTGCTT CCTCAGAGAC TCAACCTGGN TCCAGAATC ACCATCCACT AGGACCTT

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SEQ ID NO:1989: (Length of Sequence = 193 Nucleotides)

CTCCCTGTAG GTCATGTCCT TGAGAGTTAA AAGATGGGTT GAGTAGGCAG AGGTCTCAGG CACCGGGGAC AGAAGACAAG
 GACATTGAGC ACGGGCAGCC ATGCTCTTCC CAGCACCCAG AAAAGGCCCA GGGCCCGGAC TCCTGGGTGT GGTGATGAGA
 AGCGCCTCCG ATTCAGCCTC TTCTCTTCTT GTG

SEQ ID NO:1990: (Length of Sequence = 223 Nucleotides)

CTGCTTCATT TACCACCACC AGCOGATGGA CCAGTTTATT GGATTACCT ATGATACCAG GACTTTTCCA TTCAATTCAA
 TTCAACAAAC TTITAGAGAT CGCCCTTATT CCAAGCTCAT CCAGGTTCTG CTTCATGAAG GCAGGCTTTG GCATATCAGA
 CATAAAAAGC TGGAGGAACT TGAGGATTCT TTTGTGGGTA AGTATATAAA GTGCATTCCT ACT

SEQ ID NO:1991: (Length of Sequence = 385 Nucleotides)

GCAGAGAAAG TGCCAGGCAT CAACCCCACT TTCTGTCTCC TGCAGCTCTA CCATTCCCCC TTCTTTGGCG ACGAGTCAAA
 CAAGCCAATC CTGCTGCCA ATGAGTCACA GTCTTTGAG CGGTGGGTGC AGCTCCTGGA CCAGATCCCA TCATACGACA
 CCCACAAGAT CGCGTCTCTG TATGTTGGAG AAGGCCAGAG CAACAGCGAG CTCGCCATCC TGTCGAATGA GCATGGCTCC
 TACAGGTACA CGGAGTTCTT GACGGGCTG GCGCGCTCA TCGAGCTGAA GGACTNCCAG CCGGACAAGG TGTACCTGGG
 AGGCCTTGAC GTGTGTGTGT AGGACGCCA GTTCAACTAC TNCINGCAG ATGACATCAT GGAAG

SEQ ID NO:1992: (Length of Sequence = 312 Nucleotides)

GGCTTACAGG ACAGAAAGGT CCCCTCTCAC AGTTTGGGAG GTCCGAAGTC TGAAGTGAAG CTGTCAGCAG GGCCACACCC
 CCTCTGGATG CTCCAGGGGA GGGTCTTTG CCTCTTCCAG TTCTGGTGGC TCCAGGCATT CCTTGCTTTA TGGTGGCATC
 ATTCATCTCT GTCGCTCTT CAGTGGCCT TCTCTGTGTT GTCAAATCTC CTCTCTGTCT CTCTGTGAAA AACACTGCTC
 ATTGGGATTT AGGNGCCACC CCAATCTAGA TGGTCTCATC TTGAGCCTTT ACITTAGTTA CCTCTGCAAA GA

SEQ ID NO:1993: (Length of Sequence = 429 Nucleotides)

CTGTTTTTAC TCGACGAGGA GAAGACCTTT TCATGTGTAT GGACATACAG CTCGTTGAAG CACTGTGTGG CTTCAGAAG
 CCAATATCTA CTCTGACAA CCGAACCATC GTCATCACCT CTCATCCAGG TCAGATTGTC AAGCATGGAG ATATCAAGTG
 TGTACTAAAT GAAGGCATGC CAATTTATCG TAGACCATAT GAAAAGGTC GCCTAATCAT CGAATTTAAG GTAAACTTTC
 CTGAGAATGG CTTTCTCTCT CCTGATAAAC TGTCTTTNCT GGAAAACTC CTACCCGAGA GGAAGGAAGG GAAGAGACTN
 ATGAGATGGA CCAAGTAGAA CTGGTGGGAC TTINGATCCC AATCAGGAAA GACGGCGNCA CTNCAATGGG GGAAGCATAT
 GAGGGATGAT GGACCATCAT CCCAGAGGT

SEQ ID NO:1994: (Length of Sequence = 377 Nucleotides)

TGGGGTGGCC AAACCAAGTG CCCCTGTCTT GTGTCAGCCA GCTGTGGCAA TTTCAACCTT ATTCCCTTGA GAGGCCAGCT
 GCCTGCTGGA AGGAGTCAGA AGTCGGTGA GTTCATTGAG GCCTTGGAGG CCCCACTNTG GCGGGAGAGA AATCCACACC
 TGTGCCTGGA GTTCTCCTTC CCTGACCCTC TGAACCGCG CTTAAAATGC TGTCCCGCCT GGAACAGGGA GGCCACATCC
 AGCAGTGGCT CCTCAATGTG CTGCCCCAGC CTGTGGGAAT CCGTTTTTGT GCTTGATTTT TTGCTGGAGA TGTGGAAGGT
 GATCATGCCA TCCCCCATGA AGATATAAGA AACANCATAA CCATGGTTCAT CAGCAGG

SEQ ID NO:1995: (Length of Sequence = 341 Nucleotides)

GGACCTATAT GGCCATGCTC TGGCTCTACC CTGTGGGAAG CTGATCCCGG TGTGTGGCCC AGCTTGTGTA GGCCCTGGGA
 TGCTGCATCT CCAGGCAACT ATGCATTTT CCGGGGAGAG AACCAGTATG AGAAGTGGG GCAGGGCACA CATTCATCTT
 TGTACCTGCC TCTTTGGTTT GGACCTGGCC AGTCGGGTCA CTGCTCCAC GTCTGAGGCC CCGCCAGCTG GCGCTCTGTC

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CAAGCCCCCT TTGCTAGCTC TTCTTCATCT GTCCAGCCCT AACCTGACCG TGCTATGTAA GTCTTCTCCG INTTCACCCC
CTNCCNGGGT GACCGTTATA CTNCCAAACC TACAGG

SEQ ID NO:1982: (Length of Sequence = 288 Nucleotides)

GCTGCAGAGA GGTGTINTCC AGGAGCAGGC TTTCOCGCTC GGGATCCAGG TCATCCCCCA CCAGAGAAAT TTCACAGCCA
TCCAGGTTGT GCACAATCTC ATCCGACATG CGTGTINTCTG TCACTGTGCC CTGCCAACTC TCATCCTTTT TGGCCTCCAC
CTGGTGAGAA ATGGAGCAGG TGATTGAAG ATCAGGGAAC AAAGGGACGC CGTTGGTTCC CTCAAAGTCC ACAGCTNGGC
GGGCAAAATG AGCAGTGCCA CTCAGCAGGA TCTGGGGGGC GTCAGGCT

SEQ ID NO:1983: (Length of Sequence = 273 Nucleotides)

CACAAGCCAC TTTCAGCCTC CAGTGGGAAG GCTCCAGCCA CACGCCGATA TTTCGTCTCG CTTCOCGTCA TCTCATATCT
AAAAGTCATG GCTTAAGTTA GGCAATAAAA CCGTGGCTT TAGGCATCTT TAGTAAAAA GCTGAACAAA TCCCAAATTT
ATTCCCAITTT TCTTGAGAAA TAACTTCAT AAAACAACAG ACAGCTGTCA TGATTACTGA GTTTTGGCTG ATGGCGAAAT
AATTTTATG TAAGTATACT GAATAACAT ACA

SEQ ID NO:1984: (Length of Sequence = 221 Nucleotides)

GAAGAGGCTG CTCGTGCCTG GGACACCCC ACTGCTCTCA AGGAGCTGGC ATCTCAGTGG CCTCTNAGCC CAGCCTGAGC
CCTGTGGGAG TNCGGGGCA GTGACTGGAA TGINTGTCTG GGCAGGCTGC AGCAGCCGAG GTGGCCCCAG GGCAGAGGAG
TGCAGCGCAN CTCATGGGTG CCCTATGCCA CCCCTGGTGC TCACTGGGCT GCTGATGCCG T

SEQ ID NO:1985: (Length of Sequence = 197 Nucleotides)

TTGCTACCAT GAGGGAAGTG CTCGTTGCTT GGCTACAGC AAGTNATACA GCCTGCGAGG CACAGTCCCC AAAAGTCTAG
CTGCAATTCT ATTGGTGGTT TTCCCCAAC AGCAATAACA AGATGTTACC TGGAAGCACA CCAGAGCCAA TCATGACTCA
GGCCTGTCTA GATGTTTAGA TGCTTGAAA TATATTT

SEQ ID NO:1986: (Length of Sequence = 268 Nucleotides)

CAGTTGGACA TTCTCTTTA TGTTCACAT TCCAACCCAG CACAGTCACA TGCACACAG GAGATCAGAA ACCTTINGGC
CACAGCCCCA GGAGCCCGGC GGGGGGAGG GCGGGACCGA CAGGGGCGG GCGGGCCGT GGAAGACTCC TCCTACCGAG
CCTCCAGGC GNTCCGCGTT TGCATAAACA AGAGAGCTGG AGAGGNTGCC CTCAACAGTG CGCTGGGGAA AGGGGAGGGA
ACGTGACAGG CAGGTNINGG ATAGGGAC

SEQ ID NO:1987: (Length of Sequence = 282 Nucleotides)

GTCTCACTG TAAACAAATG AGGATGGAGG AACTGAGAG GNTCAAATAT GAAAGGCAGT ATGGGGAGTT AGAGCCACTC
GTCTACTCCT GTAAAGAGCA TGACTACTCA CAGTCTTTCT AGCGGGTAGT CACTCTTTCA TTTAACAAT ACTTAGTCCC
TGCAATGATC TAGGATAATA ACTCAACAGT GTATATCAAG AGCCTTTAAA AAGTTATACC TGGCCGGGCG CAGTGGCTCA
TGTAATGTAAC CCTAGCACTT TGGGAGGCCA AGGCAGGCAG AT

SEQ ID NO:1988: (Length of Sequence = 226 Nucleotides)

GTGAGGGGGT TCGGTCTCTC AGGAAGTTAG GCCATAATTT CTGCAGGTC AGTGATTAAC TTGGATCCAT CCCATGCTGT
CTTGAAGTGT TCAGGAATGG GAAATTCTCT ATAATACCA TCCTGAGGGA TAAGTATGTT CATTTCAGAT GACTTGGCGC
TCACGNTCTC ACAGTCTAAT GCATCTTCAC TGAGGTATAT GTGGCAACCT TCTGTCTTAT TAATGG

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SEQ ID NO:1974: (Length of Sequence = 304 Nucleotides)

GGATGAGATG ATCGACGTCA TCGGGGTGAC CAAGGGCAA GGCTACAAAG GGGTCACCAG TCGTTGGCAC ACCAAGAAGC
 TGCCCCGCAA GACCCACCGA GGCCTGCGCA AGGTGGCCTG TATTGGGGCA TGGCATCCTG CTGTGTAGC CTTCTCTGTG
 GCACGCGCTG GGCAGAAAGG CTACCATCAC CGCACTGAGA TCAACAAGAA GATTTATAAG ATTGGCCAGG GCTACCTTAT
 CAAGGACGGC AAGCTGATCA AGAACAATGC CTCCTGAC TATGACCTAT CTGACAAGAG CATC

SEQ ID NO:1975: (Length of Sequence = 233 Nucleotides)

CCTTCTCCAT CACCCITGGA CCTCTCTGA GTGGTCTCTC AAGGCACATT TATTTCTCT GCTGCAACCT ACCAGATCTG
 ACATCCACT CCCCCAGCAC CCATGGGCCA AGGAGGCCTG GGGCAGCCAA GGGGAGTCC AGGACCAAGC AAGCAAGAAA
 CCGTCTCTTG AACACATGGT TAAGCTTCTT CCAGCATGGC CTAATTCCC CTACCTGCCT AAGCCAGGGG AGT

SEQ ID NO:1976: (Length of Sequence = 162 Nucleotides)

AAGTGTACA AGCCCCAGAA TGCTGCCCG CCTGCCCTGC TGGGGGACT GTCTGTGTGT CTGINTCTCT GCGTTCAC
 CTCGAAGCT ATACCAGCTG TGTACAGCG CATCTCTCTG CCTCTGTG CCCCTCACTC ACCAAACAG TGTATTTATA
 GC

SEQ ID NO:1977: (Length of Sequence = 270 Nucleotides)

GGCTGAATTA AGAGCATCCA GAAAGCCAG GCCTCCATA GGCTGTGGCG GGATGATCTT CACTTTGATC TCCTTGGTGG
 CATTAGGTGT TGTGTGAGT GGCTGTGATT TCTCTCTGC AGGGGGAGTG GCATCTCTG GAGCAGCTAC GTTGCTCTGA
 CGTTTGAGGG GGATGGGTTT AAGGTGTAC TTGTCAGAAA CCACCACTGT GCTGGCATTC TTCTTCACAG GCACCAAGGA
 TGGTGTCTCC AGCTCTAGTC CAGTGAACG

SEQ ID NO:1978: (Length of Sequence = 167 Nucleotides)

TTGCAGGAGT TGCTGATATT TATTCAAACG TCATCCATAC AATAAAGAAC TCINCTTTTA AAATTCCATT TACATCAGCA
 GTTAAAAAAA AGTGACAGTG GATGAAACAT GAGCTGTAA AGTGCTTTA TGGGGAATNC AGCCAGCCT GCCTCCACTG
 TGCTGGG

SEQ ID NO:1979: (Length of Sequence = 346 Nucleotides)

CATCATAGCA ACAAAGGGCT ATGTACTATA CTCAGGAAAA CCAATTATTT GCACTGGAGG CAACTGTTCT TGAGAGAGGA
 AAAGTAAATT GTCCAAGATG TAACATCTTA TAAATAGCAA AGCAAGGATG AAAATTATTA TATTNACTA AATCAGTATG
 AGAATCCTGA TTCTTCATTA TTATATCCCC AACACTCTAT CAGTTTGTG AACAAATCAA CAAATAAGCT TGAATAAAGG
 NTCCACATCT CAATCTCTCT CCACCACTCT ATATTGCCCT TCATCOCTAC ATTAAATGN TTATTTCTGC TTTTTTCTT
 TAACAATTA TCCCTAAAGT AACTAG

SEQ ID NO:1980: (Length of Sequence = 174 Nucleotides)

CACAACTGA CAGAGGAGAC AGGAGGAATT TAATATTACA TGCTATAATG ATATTTATCT CACAGTTTAT ATTTCATTCA
 TTTATATTAT TTTTAAAAA GGTTCCTTA TCAGCTACTA AACATCTCAG CAATTGGTG TGCTAGCTC TAGATTAGC
 AACAAAGAA TGTA

SEQ ID NO:1981: (Length of Sequence = 276 Nucleotides)

TGNTCACTC ATAAGTTTC AGTGGTTAAT TACTACAGTT TAAGAAGACG TGATTTAT TTTTAGATCT GACCCAGCAG
 ATCATACCTN TNCNTGAAT TACATGGTCT TCTTTGGCT TCTAAGATGT CACACTCCTG TCTTAGTGGC CACTGCTCCT

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SEQ ID NO:1967: (Length of Sequence = 296 Nucleotides)

GCTCTGCTGG CCGTGCAGAA GCTCATGGTG CACAACCTGGG AATACCTTGG CAAGCAGCTC CAGTCCGAGC AGCCCCAGAC
CGCTGCCGCC CGAAGCTAAG CCTGCCTCTG GCGTTCCCCT CCGCCTCAAT GCAGAACCAG TAGTGGGAGC ACTGTGTTTA
GAGTTAAGAG TGAACACTGT TTGATTTTAC TTGGAATTTT CTCTGTTATA TAGCTTTTCC CAATGCTAAT TTCCAAACAA
CAACAACAAA ATAACATGTT TGCCTGTAA GTTGATATAA AGTAGGTGAT TCTGTA

SEQ ID NO:1968: (Length of Sequence = 311 Nucleotides)

ACCCCTTCA CTCCTCCCA CCAGCTCTGC AGCCAGCCTA TGGCAATTAT ATTTTAAGAG GTGTTCCCAG GACTTTTGGG
ACCTACTAAA ACAATGATGG TTATTTTAGA TGTGATGATT TATATTTATG TAGAGATATT TCTGGACCAC TCAAGCTCTT
CGATACAAA ATCAGGAGCA TCTTGGGATT TATTAAATTA TGTAAGAAGA TAGCACAGAT ATCGGGATAT TATTGTGTGA
AAATGCTGCT TTTACTTTGA TGTGATCTCA TTGATGTACA CAACCAAGTT CCAATAAAGT GCTAGAAATG G

SEQ ID NO:1969: (Length of Sequence = 266 Nucleotides)

CAATAATAAA AAGGATTATA TTCTGTATAC ATGCAATATG GGTAACCGT AAAAATATCA TGCTGAGCAA GAGAAGCCAA
ACACAAGAGA ACATGTGTGT ATGATTTTAC GTACATGAAA CTTTAGTAAA GACAAGTCTA ATCCATAGTG ACAGAAAGCA
AATCAGTAAC TGCTGACAGG GGCAATGAG GNGATGATCT CAAGGNAACC TTCTGGGGTA AGACGCTGTT CTGTATCTCG
ATCGNATTGG TGGTCACACA AGTGAA

SEQ ID NO:1970: (Length of Sequence = 317 Nucleotides)

CTCGGGAGGC TGAGGCAGAA GAATGGGTTG AGGCCAGGAG GCGGAGGTTG CAGTGAGCCA AGATTGCGCC ATTGTACTCC
AGCCTGGGCC ACAAGATTGA AACTTCATCT CGGGGAAAAA AAAAATGAGC TAAATACAAG AGATGGTAAT GCAGGAAATG
AGAGAGAAAG AAGCTATAGA ATGCACCATC AGTCTTTGCT GAGAGGAGAA GCTAGGACAC TTATGCGCAT GTNCCTGTCT
GCGTTCCTTC CGTCCCGCG GATGGTTGGA GCAGGTCTTT GTTTGCTGCA GAGCATGCCA TGTCATCCTC CTGTCT

SEQ ID NO:1971: (Length of Sequence = 263 Nucleotides)

GTGCATACTG CTGAGCGGC TACGCTGGCA GGGTAAGCAA AAGAAGCACC CCAGCCTAAG TTTACAGAGA ACCAGGACAT
CATTTTGAAT ATAACCTAGT TCTAATAGTC AAATGGCCAC TCAAGGTGAC AAATAGGAAC TTCAGTGGTC ACCCTCGGA
AGCAAGCTTT CAATGTCCTC CACCTGTAGA AGGCTGAAAA ACATCCTCCA AAGATAACAG GTTCCAATCA CTGGAACCTG
TATTACTTAT TACCATTAAA TAT

SEQ ID NO:1972: (Length of Sequence = 295 Nucleotides)

GACAAAGAAA GCAGAATAAT TTTACCTGAG AAGAAACCAG GAGGCTTCTT CTCTTCTTC TCTCTTTTT TTTTTTTTT
TTTTTGACTA TACAGAAGAA AACTATCAGA GTTAGGTTAG AGAGTTGGGT TTGGGGTCAG GTGTAGCAT GTGTTATATT
ATGGGTTAAA TTGTGTCCTC CCCAAAATTA ATATGTTGAA GTCTTAACTC CCTGTACCTC AGAATGTGAC CNCATGGGGA
AATAAGGTCA TTGCAATATA ATTAGGTAAA ATAAGGTCAT ACTAGAAGAG GGTAG

SEQ ID NO:1973: (Length of Sequence = 243 Nucleotides)

AGACCGCAGT CATCCTCAGC ACTACACGCA GGCCATNINC AAGCTGACCG CAATGCTCAT TAGCAGTAAA GATTGTNACC
CGCAGCTCCT TCATCATCTG TNCGGGGTC CCCTCGGAT GTTCAATGAG CATGGCATGG AGACGGCCCT GGCTGTCTGG
GAGTGGCTGC TGGCTGGCAA GGATGGAGTG GAAGTGCCGT TNATGCGGA GATGGCAGGG GCCTGGCACA TGACGGTGCN
GCA

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GACTACAGGT GTGCCCCACG ATGCCTGGCT AATTTTAAAG GTTTTGTAG AGATGGGGTC TTCCTATCTT GCACAGACTG
 GTGTGGAATT CCTAGCTCAA GCAATTTTCC TGTCTCAGCC TCACAAAGTG CTGGTATTAC COGTGTGAGC CACCGTGCTC
 AGCCCACTCA TGTATTCTTA ATTATTGTAT TTGTGAACATA ATCTATGAAC AACAAAAACA AACAAACAAA CAAAAAGGGT
 GGCATTTCTG GGCCACCAGG GAAGGTGGGA TTGGGGTTGC AGCTATTTTC AAATTATATT AAAAGCAGGA TCCAGTTAG
 AGCGCTATC

SEQ ID NO:1961: (Length of Sequence = 282 Nucleotides)

ATCCTCCAC CTCAGCTTCC CAAAGTGGTG AGATTACAGG NTOGAGCCAT CGCACCCGGC CCAATTATTC TTTCTAAACC
 ATTTCTCTT CTGTGTTCAT GCCTTTAAAA ATAAATTA AAAAAAAAAA AAAAAAATC CTTAAATTT CTCAGTGTT
 TTCCATATCA TTTTATTATC AAGAATATGG CTAATCAGAA GTCACAGCCA GCCCCGAAC TACAACTACA AACATGCAT
 ATTATAGGCT AACTGAGGG ATTTCTGAGG TTAGCAGATG CA

SEQ ID NO:1962: (Length of Sequence = 328 Nucleotides)

TGCTGGTGTG CCTGCTGTCA TCCTCAGGAG GCCAATCAG TCCAGCCTC TCCACCATC TTCCCTGCAG CGATTCTTC
 GAGCTCGAAA CATCTCGGC GTGTCTGCG CTGACCACTC TGGTGCTTC CATAACAAAT ATTACCAGAG TATTTACGAC
 ACTGCTGAGA ACAATTAATGT GAGCTATCCC GAATGGCTGA GCGCTGAAGA GGACCTGAAC TTTGTACAG ACACCTGCAA
 GGCCCTGGCA GATGTGGCCA CGGTGCTGGG ACGTCTCTG TATGAGCTTG CAGGAGGAAC CAACTTCAGC GACACAGTTC
 AGGCTGAT

SEQ ID NO:1963: (Length of Sequence = 277 Nucleotides)

CCAAGAGACA CCCCCGCAC TCCTGTGCCC GAGCTGTCTC ATCTGTGATT CACAGTCTGC TCTTTCTGGC TGCTTGTGTT
 GAGAAGTGAT TTINAACCC GAGGTTAGAA AGGGAGCTAT TTTTGAGCTG CTTTTGTGTA AAAGGCAAAT TTTCTGCTGG
 GGACTGGCTT TACCCGTCT ACCTAAATCA TTTCTTACTG CCTCCTGTAA CAGTCGCCCT TTGTGTCTG CTGNNATTG
 TTGAACACA GTCCACAGGT TCAGTGGTTN CATCTCT

SEQ ID NO:1964: (Length of Sequence = 230 Nucleotides)

CAATGCAACC TTTTAATTCC AAGCAGAGTC CCCCTCCCC AGCATGTGTA CACACACAGT GGAAAGGGAT GTCAGGGTCT
 GGGCAGGAGC AATACCCAGA CTTGGGCAAA AATATAGATA TCATTATATA CACACGTGGA CTGGAAAGAA GTCAAGCTGG
 GGGTGTAAAG TAGGGCAGGG GCAGGTGAGG AAAGCAGCTG GGGGGGCCCC AATAAATTAC ATTCTTGAGA

SEQ ID NO:1965: (Length of Sequence = 299 Nucleotides)

CGCGTGGAT CCGAGAAGG CACAGCAGAT GCGCTTCCAG GTGCATACCC ACCTTCAAGT GATTGAGGAG AGGGTGAATC
 AGAGCCTGGG CCTGCTTGAC CAGAACCCCC ACCTGGCTCA GGAGCTGCGG CCCCAAATCC AGGAACCTCT CCACTCTGAA
 CACCTGGGTC CCAGTGAATT GGAAGCCCCT GCGCTGGGG GCAGCAGOGA GGACAAGGGT GGGCTGCAGC CTCCAGATTCT
 CAAGGATGCA GACACCCCA TGACCTTCC AAAAGGGTCC ACAGAACAAG ATGCTNCAT

SEQ ID NO:1966: (Length of Sequence = 320 Nucleotides)

GTCCCTGCAC ATGCGTCTGG CAAGACGGGT CAGCTTGTG GTCTGAAGCA GGAAAGTTTG TCTGTNCTTA GCCAGTAGCT
 TGGCCCTGTT GCGCTGGTT GTGTAAAGGAG AGAGACTTGT AGCTTCAGGT CTGGATAAAT NACCCCTTGA GTGTGGCTCC
 GTGGTGCCCC GAGTGGCCCC CTCAAGCTGA GTTGGGGTCT TCAGTCCCC ATACTTCTTC CAGTAGATCC AACAGGAAGC
 ACAGAGGGGG CACTGCATGT TAGGTGGGCC CCAGGCATAC CACTGAGCAG ACTGTGTGGT GTGGCACTC TCACAAGTCA

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CTTAGTGCTT ACCTCTTAAA GAAGGGCTGC TGTGAGGAT TCCNTGAGAT AGTGTGAA AA

SEQ ID NO:1954: (Length of Sequence = 389 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTGT TCCGTGTCCTC TTGGAAGGC TGAGTGGGTG ATGCAGCACA
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACTGTG ACAAAGCATA AAGGACTTGG GGTGAGCGT GTGTNTGGGC
TCAAGTGACC ATGCAAGTNC TGTCACCTCC TTCCTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTTCTT
CAAAACAATA ACAGAAACAC ATCAAGNTTN GCGTCACTGA AATTGAAGTT CTGAATTCTG CCGTCACCCC AGCAACAGTG
CCAGTTATGA TGAGACACTT GACCCAGCAC TTGGGTTGAT GTCTTTGGCT GTTACCGTGG CACCTAGGT

SEQ ID NO:1955: (Length of Sequence = 277 Nucleotides)

GCCTCTAACT CCACGGCTCA AGTAATCCTC CTGCCTCAGC CTCCTAAGTA GCTAGGACTA CAGGTGCACA CCACCACACC
CAGCTAATTT TTTTNCITTT TGATTTTGG TAGAGATAAG GTCTACTAT GTTGCCAGG CTGGTCTGAA ACTCCTGGCC
TCAAGTGATC TGTCTTAGCC TTCGAGTAG CTAGAACTAG TTTTAATGAC CNAAGAATT ATGTGTTTAC CNGTGATTTT
ATGTGTTTGG TTAAGACATT CAGAATTTAG AGAAATG

SEQ ID NO:1956: (Length of Sequence = 380 Nucleotides)

GTGTAATGTT CTGAGGGTGG CGAATGCAGG GCGCGTTCC TCCCGCTGTC GATCTGGAAC ATCTTCTCGC CAACAAAGAG
CAGGGTGAAG ATGAGGGCAA GCTGGTAGAC AGCATGGCCC AGGATGTTCT TCATCATGGT CCGTGGAGATG AGCGGCTTGT
TGCGGCCGTA CGGTTTCTC AGCAGCAGGG TCTCGTGGG CGGCTCAGTG GCCAGTGCCA GCNAGGCAAA CGTGTCCATG
ATGAGGTTCA CCCAGAGCAT CTGCACGGCC TTCAGAGGGG AGTCCTGCGT GATGCAGGCG CTTNTAAAGC CACAATCAG
GCCACCAGT TGACGGTGAA GCTGGAACCT CAAGAATTIN GAGATGCTGT CATAGACGTT

SEQ ID NO:1957: (Length of Sequence = 328 Nucleotides)

TGTGATGTTT CTTTTTAGC CTGTGATGT GGTGAATGT ACTGATGAT ATTGAATAT TAACTGGCT TTGCATCCCT
AGAATATACC TCACCAGGTC ACTGTGTACT AGGTGGTGC AAAAGTGCTT GCCATTTTGG ACCATGAATT TTGAATCATT
AAACTAGGC TCAAACACAT CTGTATTAA CAAAGTAAGA ACCATTACAA TCAACACAAT TTTGCCAACA AGAAATAAGT
TTGTTTACTC CTGTAGCATA AAAATCCGTG CTTTGAGATT CGAGGAACCT TTGNAAGCA CTTTCTGCAT CCGTCTGGTT
GTGGAAGC

SEQ ID NO:1958: (Length of Sequence = 254 Nucleotides)

CTAGAAAGTA TCTTCTCTT ATTTAAGTTA ACAAATTTT AAGGATGGT TCCATCTATA AAATGGACAA AGTACAAGCT
CTGTACAGCA GTTCTTTTAA AAAATCAACT GGAAAAAAA ATTACCAAAC TATATTTTGA ATTTGCAAAA CATACTCACA
GATACCATCA TCTGAGCTTT TATGAGGACA TAAGAAAGGN CCACCACAGA GAAGACAACCT AACTTGGGCA CGCTTTGCTC
GAAGGGCTCT TAGG

SEQ ID NO:1959: (Length of Sequence = 259 Nucleotides)

GTAATACGAG AAAAATCACA ACAGAGTAAT AAAGATATAA AACTTTTACA ATTAACACTC ATCAGTGTGA TAACTAAGC
CCATGTAAAA GTAAAAATCT CTCACAGTTA ACAAACGTCT TTAATTTTAC TAAGAAGGAA CTGAAATTAA AGTCCTTAGT
CACTTTGGAG GTGGCTGCAA AAGCTCACAA CATAGTTGAT CCTTAAATA ATTATGAATG GCAACCAGTG CTGCCTTTCT
GTAICTCAACC ATGCAACTG

SEQ ID NO:1960: (Length of Sequence = 329 Nucleotides)

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SEQ ID NO:1948: (Length of Sequence = 349 Nucleotides)

TTACAATCTG GCTGGAAACA GATAATTAGA ACATATCAG AGAAACAGAA CAGTTAAGTG CCAAGCTCTG GTGGAGGTTT
 TAAGTGCCAG AGGTCAGGAT ATATTTTAA GTGCTTCTGC TTCCAAACAT CACTCTTTCA AAACAAAACA CAAAGATCCC
 CAACCAGCAT TTCTGCCCC TGAGGCACCA GCAAGGTATA TAAACGGGCT TGCAAAGTTT GATATACGGT CTCCAGCCTG
 GCTTTCTTTA GTCTGGGCTC AAAAGCCAGA AACCTCTGGG GGCCAGAGAA GCGCTCTTTG TTGCCAAAC AGCATCTCTG
 CACATCCTGT TCTACAGCAC CGTCAGTTT

SEQ ID NO:1949: (Length of Sequence = 378 Nucleotides)

TTCAATCTCG ATTTTATCCC AGCTGTGGG GATATTGATG CATCTTAA GGTCCCAGT CCTGATGGAA AGCCTGACAA
 CCTTGGCCTA TTGGTATTGG ATGAACCTTC TACAAAGCAG TCAGACCTTA CGGTGCTCTC ACTCTGGTTA ACAGAGAATT
 CTAAGCAGCA CAACATCACA CAACATATGA AAGTAAAAG CCTAGAAGAT GCAGAAAAGA ATCCCAAAGC CATTGACACG
 TGGATTGAGA GCATCTCTGA ATTACACCGT TCTAAGCCCC CTGCGACTGT GCACTACACC AGGGCCATGC CCGACATTGA
 CACGCTGATG CAGGAATGGT NCCCGGAGTT TGAAGAGCTT TTGGGCAAGG TAAGCCTG

SEQ ID NO:1950: (Length of Sequence = 357 Nucleotides)

TCATTAACIT TACGAATGAA AGAAAACAAT TCCATCCCTC TCACAAAAG GACATCTTTT AAGCTTTCTT CCCAATCTAA
 CCTCCATGGG ATCTCAGAAA TTCCAATTCT TATAACTCAA ATCCCCACAG TGGTGTAGAT GCATTAACTC CCGGGGACA
 GCAATCTGAG GCAGGCAGGT TCATTAAACA AACATGTTCT GTGCCCTCTG GCAGAGAGGG CAGCAGGACA TGCCTGCCCC
 CTGAGCCAAG CTGTGGCATG GGCAAGGACA TCAAGTAGCT GACAACGGTC TGTCCATCTC AGCTGGGGCA GAGGGGCCAG
 TTCAGCCTTG AACAGCAGT TNGGGAGTGT CTCAGCT

SEQ ID NO:1951: (Length of Sequence = 336 Nucleotides)

CTATCTCCCC AAATCTACGT TTCACCATTT GTACTGTAT TTTTFTAGCC CAAGCCACCT TTATGTCACT CCTGGAACAT
 AATAACTGCT TTCTCACTCA TCTCCTACAT TTINACCTCT TATAATACAG TCCACCTGT ACCGAGCAAC AAGAGTTATC
 TTTCTGAAAT GCATATTAGA TCATGTCACA TCTCTACTTG AAGCTCTCTA AAGATTCTC ACTAAAAGCG AAGTCTAAAA
 TTTCCACCA GACCTATAAG GNCCTTAAAT GATCTTACCT CTCTACCTAC CTCINCGATC TTACCTATCT TCAACCTGG
 TTCTATTTTC TATATC

SEQ ID NO:1952: (Length of Sequence = 413 Nucleotides)

CAGTATGTAA TTTAATCAGC AAATGCCCA TTTCATCTC TACCGGAAAG CTTTCAGACG CATTCOCAGA TCAGACAGAG
 GACTAGGGTT AAGGCTGGGA ATGAACACC AGCTAGTATC CCAGTGAGCT TTCCCAACA CACATACACA GCAAGTCAGA
 CTAAACAACG TCCAACTGAA GACTCACCTC AAATACTTAG ACCTAAGATT CACGTCCAGG CTCCTTCAGA TACACCAGGT
 AAGTAAGCAC TTGGCATTCC TATCTAGCC ATTCACCTCA CAGAATCTTT TGGGTGCCTA CTGTGTGCCC AATACTGTGC
 TTAGTGGTAC TTGCCCTCAG CAGGAAAAA AATTAAAAGT GTTAAATGTT ATGAAGGAAC AGATTGGNAT AGGAATCACA
 AGGCATTGAG GTC

SEQ ID NO:1953: (Length of Sequence = 382 Nucleotides)

GTTTCACTCT TGTTGCCAG GCTAGAAATGC AGTGGCGATC TTGGCTCACT GTAACTCTG CCTCCCGGGT TCAAGTGATT
 CTCTGCTC AGCCTCCCTA GTAGCTGGGA CTATAGGTGC ATGCTGCCAC ACCCAGCTAA TTTTFTGTG TTTTGTAGT
 AGACAGGGTT TCGACATATT GGCCAGGCTG GTCTGAACT CCTGATCTCA AGTGATCTGC CCACCTAGGT CTCCCAAAGT
 GCTGGGATTG CTGGCTGAG CCACCGCACC CTGCCTAGAA CATGCTTTIN AATAGTGTCT CTAACCATCA TGTTTAGGGC

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ACCCTAAATA TATGGTACCT CAACAAATAA CTTAAAGATT TCCGTGTGGC GTGAACCATT TCAATTTGAA CTAATATCCT
TGAAAAAAT CACATTATTA CAAGTTTTAA TAAATACAGT AGAGAGCTGG CATTTTCTA AATACTGGAT TTCAGATCTG
G

SEQ ID NO:1943: (Length of Sequence = 351 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAAACCT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG
AGAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTATCTC TTTCTCTACT
CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCCTTATGG CAACTACAAC
AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC
TCACTCACTC TGGCCTGCGC ACTGGGGTTG T

SEQ ID NO:1944: (Length of Sequence = 406 Nucleotides)

GCCCAGGCTG TCTCAGAATC TTGATGGGGT GGTCAATTGAG CTCCTCTTCC GCCAGAGCAA GATCAGTGAA GTCCTGGGAG
GCAGTGGCTA CAACTCGGAC CGGCTCTGCC TGCCCTACAT TCCTCAGCTG ACAGATGAGG ATCGTTTATC CAAGAGGAGG
AGCAITGGAG AGAACATCTT CCTTGAGGAT CCCGAGGATG GTCTGGTGAA GACCAACATG GAGAAGCTGA CCTTCTATGC
CCTCTTAGCT TCAGAAAAAC TTGATCGTAT TGGCGCCTAC CTCCTTGAGA GGCTCATCCG TGACGTGGGT CGNCATCGAT
ATGGGTACGT GTGCATTGCT ATGGAGGCCT TGGACCAGCT GCTCATGGCC TGCCACTGCC AGAGCATCAA CCTCTTCGTG
GAGAGC

SEQ ID NO:1945: (Length of Sequence = 362 Nucleotides)

TCAATTTGTG AAATTNAGAA TTCTGCTATG ACAAGTGGAA AATTGAGAAA AGACGCAGAG CCACTTTTTG TNATCGTGTA
GGTGACAAGG AGTCTCCCA GTATATCCTG CTAATAGGAG TAGCTCTCAA AAGTTAATCT CAATAAAGCC TCCTAAAGTC
TCTGGCAAAG AAAACTGCTG CAATCCCTTG TGCAATTCTC CAGACTAAGC TGTATGGGGG AAGCCTACCT TTTTTCAGCC
CGAAGTTCAG GAGACTGAGG ATGTAAGTGG GGACATGATC ATTGNTCAA AGGTGATTGC TTAAGTATCT TAAAAATGTA
TAGAGCTAAT CTGAGTACCG CTAAATTCA AGAGCCGTGG CT

SEQ ID NO:1946: (Length of Sequence = 408 Nucleotides)

AACCTCINAC CCCAGGTTT AAGCAGTCCT CCCACCTCAG CCTCCCGGGT AACTGTTCTT TGTAACCTCTC TCATCATCGA
GGCTATATAT TAATAGACAT GGTATTAAGC CCACACGAAA CATTGAGAAT TAGAATTGGA TTAAGAAGAC GCGTTTTGGC
ATCACGCTGA CTACTCCTCA TCTCCGTCCT CGGGGAGGGT GATGCCAGCG TGGGACTCTT TGGGAAGGCCT ATCAATCACA
GGTGCCCTAA AATCAAAAGG TGGGTCAGTA GGTAGGGAG GGNGGCGCGA AAGGAGATGC CAGCGGGTGT TAAGAAGGAT
ATGGTCAGAA GAGCTCTTTG TCTCCATCCA CGGGGCCCTCT GCTCAGCCCG TGTTGTCTCG GTGAGTAATT CGGGAGCAGT
GCACGGCT

SEQ ID NO:1947: (Length of Sequence = 426 Nucleotides)

CCATTTGACA CTGTTACTAT CTGCAACAGT TCTTGCACTA GAGGATGCAC TTCAAAGTGC ACTGCTTTAC TGCTCACTG
GAATTCATAA AATCTAAGCT TTATCTTTTT AACATTAAGC TGTGTGGGAA TGTAGCAACC TCCTGGGTGG TGGGGTGGGG
GGCATCTTCA ATTATTTAGG TCTCACTGGA AAGTTTGAGA TCAGAGTTTG GTAGGTGGTG TAAGGGGACA ATGAGTAAGG
GAGAGAAAAT ACAGGACTGA CTTGGGGCAA AAAACGCCTG ATAATAATTT GTGAAGCACA TTTTCAAACCT CATTTATTCC
TTACAAGGAT CCTAAGAGGC GGGTATTATG TCCNGGTTAT ACCTGGAGGC TTAAATTGAA GGAACATCTN CAAGGGCACA
CAGTTTAATG AATGGCTGAG GTAGGA

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SEQ ID NO:1937: (Length of Sequence = 393 Nucleotides)

TCACCTCTGT CACCCAGGCT AGAATGCAAT GGCACAATCT CGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTGATTTC
 TCCTGTCTCA GCGCCCCAAG TAGCTGGGAT TACAAGCACT TACCATCAGC CCCAGCTAAT TTTTGTATTT TTAGTAGAGA
 TGGGGTTTCA CCAATGTTGGC CAGGCTAGTC TCAAATCCTT GACCAGCGGT GATCCACTCA CCTCGGCCCTC CCAAAGTGCT
 GGAATTACAG GGTGAGCAC GCGCCCCAGC CTGINTTTCA TGTTAGATCA TAATATGATC TCACCAGATC CTTACTGAAA
 ATGTACCTTA TTACAAGTAG CTAAATTTCC ACATAGAGGG NTAAAAAGAT TGGGGAATCA GGTATGACT TTT

SEQ ID NO:1938: (Length of Sequence = 407 Nucleotides)

GGCCTCCCTG TOGGGTGCAA TGCACTGGCT CAGATCATAG CTCCTGCTG TCTCGAACTC CTGAGCTCAG GCAGTCTACC
 TACCTCANCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCA GCCAGAACAT CTGTTTTTAC ACCCAGAGAG
 CGCCCTCGT TAGGACAGAA CCAAGGTGCC CAGAGCCAGG AAGCCGCCCT CCTGGCGCCC AGCATCTGAG CTTCTACACG
 TGATGGGCGG GCTCAGGAGA GGACAGGGAG TGTGGTGGG AGTTCCACAG CTGGCGCGGT GGGGGGGCCC TTGCACCGCA
 CTTGCGCCT CTGACTGCC CGATCCCG CAGCCCTGT GCGGATTC ATTTTCCTCC TTTCTYCCAG GGTACTGGCC
 CCAGCAA

SEQ ID NO:1939: (Length of Sequence = 412 Nucleotides)

GACATGCCAC CACACCAGTT AATTTTTTGT ATTTTCAGTA GAGATGGGT CTCACGATGC TGTCTGGGT GGTCTGAAC
 TCCTGAGCTC AGGTGATCCA CACTTGGCC TACCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCG GCTAAAAGAA
 AGGAGATTCT AATGCATGCT ACAACACCGA TGAACCTTGA GGACATGAGC TTACGTGAAA TAAGCCAGGA ACAAAAGACG
 AAGGCTATAT GAATCCACTC ATATGAAGTA CCTCGATTAG CCAAATCCAT ACAGAAAGTA GAACAGTGGT TGCGCGGGG
 AGGGGGAAAT GGAAAGCCTA TATTTAATGA GTCCAGAAGC TTTTTTTTGG TTTTGTPTT TAGACGGAGT CTCGCTCTG
 TTGCCCAGGC TT

SEQ ID NO:1940: (Length of Sequence = 421 Nucleotides)

ATCCATCCCC TTGCCAGGG CTCACATGC CCGCTCCCC CAACCGGTCC TTCCCTTGG GCTGCGGTG CAGCTGTGGG
 CCCAGGCTTT GGCGGCCCA GCTCAAGAC AGTGGGACAC AGAAAACACT TTGCAGCATC GCCTCTCCCT CCGCCACACC
 CAGGTACGA GAGATGGGC CCCACCGAG AGATCACAGC TCTGGTACAG GGAGGTGGC AGGGTTGGAG AGGAATGGAG
 AGACATGICA CCTCTATAGA AACCGTCCA AAGTACAAGC TAAGCAGGGG GAAGGAGGAG GGCCAGAGAG CAGCGGAAA
 GAAGAAAAGA GGAACCGGC AGGGGTTCT KGGGGAGGAG GGCTCACAM CACCCCGCAG ATGAGCGTCT TCACCAAGAA
 GGTGTTCTTC GAAGTKGCGG T

SEQ ID NO:1941: (Length of Sequence = 377 Nucleotides)

GTCAGCTCTA GAGGCACCT GCATCATGCC CACCAGGGTG ATCCCCCTGG GATNGACCAT CTCGGGATAT GAGGCCTCGG
 AGGCTGGGGT TGAGATTGG TCCTGAAGAG CTTATAGCCA GATTGCCACA TTCAAGTGTA AGTCCAGGAA AGGGGCAGGC
 GGCAGTGCAC AGGGATTAT CAGTCCAGA ACCTCACAGT GATAAGAGGC TTTAGAGAGC ATCTAATCGA GACCTTTAAT
 TTTTCGGGGA GAGCAGCTGA GGCGTGTGG AAAATTAGTG GAGAGCTGAC AAGTGTCTTG GCTCCTGGCC CAGGGGTCCG
 TGGTCCANCA CGTTGTGTT CAGTTGGAAG CAAAGGGCTT GCCGTGATT ACCTTCC

SEQ ID NO:1942: (Length of Sequence = 401 Nucleotides)

TGAGAACATT AAGAAGGACA ACAAAATTAA ACATTCTTTA ATAAAATTCC TATAGAAAGC TCAGTCATAG GGCAAATACT
 CATTTCCTT TCCCATATCA CCGAGGATG AGAGCTCCCA ATATCTTTG GAGAATAAGC AGTAGTTTGG CTGGATGTG
 CCAGGACTCA GAGAGATCAC CCATTACAC ATTCAAACCA GTAGTTCTTA TTGCACATAT TAACATTACT TGCCCCTAGC

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CACTACGGCG GCGTGGTCAG CCTCATCCCC CTCATCCTAG ACTTAATGAA AGAATGGWTC GCCCACTTCG AGAAGTTGCC
GCGCAAGGTG CTGCAGGGCA CGCGGGCTGC CTGCACT

SEQ ID NO:1931: (Length of Sequence = 343 Nucleotides)

ATCACTTCCC CACCCACAG GATCTGCCCC AGAGAAAGTC CTGCTCTGTC ACCAGCAAGC TTGCGGGTGG CCAAGTTGAA
TGATGCTGCC CGGGGCTCTG CCAGATCCTG AGACGCTTCC CCTCCCTGCC CCACCCGGGT CCTGTGCTGG NTCTGCCCC
TTCTGCTTT TGCAGCCAGG GGTGAGGAGG TGGCTCGGGT GTGGGCTGGA GAGGCAGAAG CCTTTCTCTG TTGGTGTCCC
AGCATATGGA GCCCCCTGGG CTGAGCACCA AGACCTTGAA CCTTTTTTGT TTTACCTTTT TTCCAAATAA CAGTTTGGAG
AAATATCAAT GAAATCTGGG GGT

SEQ ID NO:1932: (Length of Sequence = 314 Nucleotides)

TTTCATGGGT TTTGTGTTTG TTTATTTTGA ATACTGAAAA AGTCTTTTGG GCTCTGTGGG GTTCCCCACG CTCACGGCTC
CTTTCTCCCA CACTCACTGC CCTTCTTCCC ACAGCAAATC TATTTCAAGG ACAGTACTTT TTAAAAATGAT TAATGTTGAG
TTCTCAACTA GCTCTGCAGA ACTAGAGGAG CTGTTTGTCAT CTGTCTGTGC GGATGGAGTT TCTTTTATCT GACACCAGGT
CTCCAACCAC ACTGATGCAA GGCATTTTAT CTACAGAGCT CAACTAGAAC CCTTTTTC TTAGGCTACT CCAA

SEQ ID NO:1933: (Length of Sequence = 378 Nucleotides)

AGCTTCTGCG GGGACCACAG CTATGTGACT GAAGCTGACA TCATCTCTAC CGTTGAGTTC AACCACACGG GAGAGCTGCT
GGCCACAGGT GACAAGGGCG GCCGGGTCGT CATCTTCAG CGGAACCAG AGAGTAAAAA TGCGCCCCAC AGCCAGGGCG
AATACGACGT GTACAGCACT TTCCAGAGCC ACGAGCCGGA GTTGACTAT CTCAAGAGCC TGGAGATAGA GGAGAAGATC
AACAAGATCA AGTGGCTCCC ACAGCAGAAC GCGGCCACT CACTCTGT TTCCACCAAGA TAAACTATC AAATTATGGA
AGATTACCGA ACGAGATAAA AGGCCCGAAG GATACAACCT GAAGGATGAA GAGGGGAA

SEQ ID NO:1934: (Length of Sequence = 239 Nucleotides)

ATTTAAATTG ACAGCCTTCC ATTTTTCGAG AAAGTACAAA CAGAACTGCT TTAGCACCCA TCGAGCCCCA AACGGGTAAG
GTAAGCCAAG GTTTTAATGA CCAGCCAGT ATCTAAGCTT CCAAACGGAT GCCAGCCAT CACATACTYA CCTTGGGAGG
CTGCTGCACG GGCATTCTCC YGATGCTCAC GGCCTTGGK GTAGGTTTCA RGATCGCCTC TTTGAGGAAG GACTTCAGG

SEQ ID NO:1935: (Length of Sequence = 319 Nucleotides)

TTAATTTTTT TTTCCCATAG AGGAATAGCA TTACAGTCTA ACAATCAGAA TTCTGTTACA CACATACACA GGCATGCCAC
ATGACCCAGT TGAGGTGGT GTTCTCTTGA GTCTGTGAC ACGTCACATG GTCAAAGTCT CCTCATTTCA GCCAGTCTCA
ACACAAAACA CCCAACAGG ATGCACTCAA CTGTGTGGT CCATGTGGAA CTAGGTGGCA GGGCGAGAGG GAAAGTAGTA
GAAGGGGGCT ATGGTGTGTC TGCAATTCAGT CCCCACAT AAAGCCACAT GGATCTAGGG GGGGTATCCA AGAGCTCTG

SEQ ID NO:1936: (Length of Sequence = 415 Nucleotides)

CTATTTTAC AAATTATACC TAATGAGTAA AATTAGTGA AAGTGATAAC ATGCTTCTAC CTGTATTTCT AGTGACCCCT
TAGCGGCAGG TATTTATACC TGGTATTTAT GATGCAGTAT ATAAGTGGTG AACATAACT GACAGTATG TGCTTGCTGT
ACATGCTGG TCTTTGAAA CAGATTTAG TAAGCATTTT CCAGAGGTAA AACTGTGTCC TTATTTAAT TTTATCTTA
GGGCAAAGTA GACAGGGAAT ATTTCTTGA ATCTATTTCC AAATTAATAT TTTTTCCTT GGTATTTCTA CACTTTAAGG
CCATTTGGTG CAATTTAGAA AGTGTGGCC TCCCTTCCG TAGCCACATT CAAAATTAAC TTCCAAAACC TCAGGAACAG
TACAAGGAAT TTGAA

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GTCAGTTGGG AGCTGTGATG GATCTGTGG CGGGTTTGG ATGTGTAAAG AATGATATAT ATA

SEQ ID NO:1924: (Length of Sequence = 231 Nucleotides)

GTCTCCCTG ATTCTCAACC TTGCAACCT GCCTTCGTC ACTGCTAGGT CCACGTAGGC TTAACCTTGA TCTTATATGT
AGGACCGGTC TTCACCTTAA GCAAGAGAAA TGTAAGAAGT GNTTCCCAA CTCAGTTGCT GGCCAGCTT TGGCCTCGTG
TTCCCTTCT GAGGACTGAC CTTGGTATT GCTCTGGAGT CTCATATCC CTTTGGCCCT AACTGACCAC G

SEQ ID NO:1925: (Length of Sequence = 249 Nucleotides)

GTTTTACTT AACCATCTA TTGTGGGAA TTGGGTTTC ACTTTTTNT TATAGATAGT GGTGCACTGA ACATTTTAA
ATAGCTTTT NCTTCAGTGT AATTATTTCC NTAGAGAAAG TTACCAAGAG TGGTTTACT AGTTCAGAGG GCTTCAGGAT
TTTATGGCT CTNCTAGCG GTGCTCTATT ATCCTNAGA AGACTTGTAT TACTTCCAGT GTCAAGAAGG TTGCNCTTCC
ATGGAATGG

SEQ ID NO:1926: (Length of Sequence = 367 Nucleotides)

TTTTTCTCAG CAAGGAACAG TCATGAGAAA GAGAATGCGT TCCTAGGGGG AGGTCTCTAA AATGGCCACT CTGGGACTGT
CTGTCTTATA TGGTTGTGGA TAAGGGATGA AATAAACCCC GGTCTCCCTT AGCGCTCCCA GGCTATTAG GACGAGGAAA
TTCCCGCTA GTAAATTTA GTCAGACTGG TTGTCTGTTT TCAAACCTTG TCTCCTGATA AGATGTTATC GATGACAATG
CATGCCGAA ACCTCATTAG CAATTTTAA TCCGCCCCG GCTCTGCCAT TTGCCCTGTG ATATTTTATT GCCTTGTGAA
GTATGTGATC TCTGTGACCA CAACCTATTC GTACANITCC TCCCTT

SEQ ID NO:1927: (Length of Sequence = 231 Nucleotides)

CTTTTATTGG GGGCGGATAC CGCAAGGGCC CGCCACGGT CAGGTTAGTG TTCTGCTCTT GCAGAGGCGC KACAGCCTGA
CACCTCCACC TGCCACCGC CGGGGTTAG TGAACATGC AAAGCTCAGA GGGTGGAGGC AGGGGTGGTC GCTGCTGAGA
CCAGGGCTGN GTGCAACAGG AGGCTCAGCA CAGAGCCTGG CTGGTGTCCC TGGGCCCAA GGGGGCTGGG G

SEQ ID NO:1928: (Length of Sequence = 283 Nucleotides)

CCCCTTGCT CCCCTGAGCC CAGGTATGTA ATTCTACAC AACTGATOG AGCTGTINTG TGTGTGTATA TGTGTGTG
TGTGTGINTT AATGTGACAT GCATGACTG ATCNGAGAA GCCTTTATAC CAAGAATAGA GCTGGGATCT CAAGCCACC
CTCCAAGAT CAGACAGCAG AGTGAACCAG GAGGCCAGA CAGGCTTGT GTCARATGGC AGACGNTGCA GCAGGAAGCA
GAACCACGG ACGGGRNCA TGGGATGCTA TGGCAGCCA GCT

SEQ ID NO:1929: (Length of Sequence = 287 Nucleotides)

CTAGGAAGTA GGGAGAGAAT TACTAAGTA AGGAGAGAAA GGAAAAAGAA CAAACATGGA ATATGNTCAA GCAAATAACT
TCCAACAGAA ACAAGANGAT ATGTTTAAA ATATATTTC CCTGCCAAT AGTAAACTT ATTTCAGGCA CAATGCATTA
CTGAGGTGAA ATTAAAGTA CATAAAATTG AAAACATCAC ACTGGANAAC ATTTCATGGG GCTCAACTGA AGGTGGCATA
GTCCAGGAAG GCATTTGGAC ATGTATGGG TGTTCCTTG TTGCCC

SEQ ID NO:1930: (Length of Sequence = 357 Nucleotides)

ATGGAACACT ACTGCAACAG CTCCACAGAC CGCGGGTTC TGCTCATGTT CCTGGACATC TGTTCAGAGC TGAATAAGCT
CTGCCAGCAC TTTGAGGCG TGCACTCTGG CACCCAGTC ACCACAACC TCCTGGAGAA ATGCAAAACC CTCGTTAGCC
AAAGCAACGA CTTAAGCAGC CTCAGAGCAA AATACCTCA TGATGTGGTG AACCACCTCA GCTGTACGA GGCCGGGAC

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GGGACCAGCA AGGGCTTGGN GTTGAAGGG GTGGCTCAAG GAAGCCTCTT TCTCCACTCA CA

SEQ ID NO:1917: (Length of Sequence = 375 Nucleotides)

GAGATTAAAA TAAACAACAC AAAATGTATT TAAATGAGAA ATTGAAATAT TAAAAATAAT ATTAGGTGAC ATTAAAACCTG
TCATAGAAAT AAACGTGTATA TACAACAAAT AAATCAATGA TTGTTAACCT TTTTAGACAG TTTGAATATC AGATTATAAT
GAATAGCAAT ATTAGCCAGT AAAAAGAGCA TATAAATTAT TTTAAAATTC CAAATAAAAA TATTTAAAAT TTTGAAATTT
TGGACCCAAA ATTATGTCAG TAATTTTCATG AAAGTAGATC TCCAATAGGT CCTATATTCT AGACACTATG AAATGACATC
AGAAACCGTC AATTAAAGTG TACCCACAA GTGATAACTA GCTACCATAC AAGTT

SEQ ID NO:1918: (Length of Sequence = 315 Nucleotides)

AATATACAGT ATGATACACT GATGTGCAGA ATGTGATTAG TTTATTAATC ATATGTGAAA ATATTAGTAG CTACATATGG
CCAGAATAGA TTTTCTCTC TACAAATGTA AGTTAGTGT GATAGAATTT GTTATGCGAT ATTTGGTTCT TTGGTTTCAG
TCTCAATGCT TTCTTCTTGG CATTTTCATG ACTCTGTAAA TTAACCTCAG CATCAATTTT CTTTAAAT CAACAGTTAT
TCAAATTGAT CGGAAATTAA ACTTGTATGT AGCTAGTTAT CACTTGGGG GTACACTTTA ATTGACGGGG TTCTG

SEQ ID NO:1919: (Length of Sequence = 285 Nucleotides)

CAGAAGTAAA AGATTTTTAT TGTTCTATAG ACACCTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
GATCAGTAAA AACATGCAAA AGTNGAAGG AAAGGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGNTGG AATTTAGAA
CAGAGGWWGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCC

SEQ ID NO:1920: (Length of Sequence = 181 Nucleotides)

GCAGGTTTAT TTTTTTATTT ATGTATTINA ACTGACTTAT TTKTGTATCC CACTAGAACA ATACATTCAC AATATACTTG
CAGAACTKTG CCTGGSGCAT CAGGGGAGCA GAGAACTTTT CCAGTGAATA GTTTTGAAG AAAGGAGTAA AATCTCCCC
AAACCCTAAA GGCATCCTTT T

SEQ ID NO:1921: (Length of Sequence = 351 Nucleotides)

AGACGGGGTC TCACTCTKTC GCCAGGCTG GAGTGCAGTG GCGCAATCTC AGCTCACCGC AACCTCCGCC TCCCAGGTTA
AAACGACTCT MATGCCTCAG GCTCCCGAGC AGCTGGGACC ACAGGCACAT GCCATCATGC CCGGCCAACC TTCTGTACTT
TTWAGTAGAG ACGGGGTTTT ACTGTGCCAC ACAGGCTGGT CCCGAATCC CGACCTCAGG CGATCAGCTR CCTCAGCCTC
TCAAAGTGCT GGGATCACAG ACGTAAACCA CCATGCGGGG CCCAGTCTT TTCTTCAGAG GGCTCCTNAG CACCCCCAAC
CCCAAACCTG AGGCCTGTGA GAGTCTATCC G

SEQ ID NO:1922: (Length of Sequence = 198 Nucleotides)

CCTCATCTGG ACACAGATGA TTTGCCAAAG AAGCGGCCTG CCCAGATCTG CAAACCTTGC AACCCAGCAC TCTGTCATAT
CTCGCTTAGC GTGTCCACAA CTGGGATGCT AGCTGGCGTA AAGATGCTCA CGCAGCCACC AGTGCCCTCTG CCGTCCATAA
GTGCAGTGTG ACTTACCTTC TGAGAGTGGC ATCTGCTG

SEQ ID NO:1923: (Length of Sequence = 303 Nucleotides)

TTGATTTGCC TATGGTGTGA AATCCTTGT TATTTTCTA AAAAAATAAA ATTTAAAAAG AAAGAAAACT AAGGAAGAAC
AAGANGCTAT TTACCCAAAG TGAGCTTCA GTTTTGTAT TGCATGGCTG TTTGACTGCC TTTCCGCCCT ATGAAATCA
AGAAAATCTT TTTTAAAAAT GGAGTCTGCT TATTTTCCAC TCCTTGCGTA TAATACAAAT TCAGTTTGTG AGGTTGGATG

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AATGCACCCA TTTGGCTGCC AAGAGCTTCT CACTGCCTTG CTAGCAGCCT GCCACTGINC CCTGGCAAAT TGAAACCACC
 CACGCAAACA CTCAAAACCC CAATCTCCTT GCTAATAAGA TACAACCACT TAACACCGTG AAAAATGCAC ATCTCCAGCC
 TTCATTTCAA AAAAGAGCTC TGTACTAAAT GCAATATGCT TTTAAAGGGG GTTTTACAGG GACCAATCTC AATGCAAAGA
 CCAGTACCAG ATGTCGAGT TTTGGTTACA GGTTTATAAT TAGACACAAA ATTCACTCCA CACTGGAGTT TTACTTTCAA
 GCTGGAGTGA GCATTAGTTC TA

SEQ ID NO:1912: (Length of Sequence = 380 Nucleotides)

TCATGCTTTT AATACAACT TAAAAAATC TGAACAATA GAAACTGTAC AGATTTGATC AATCTTTTTG TTTTGTTTTT
 AAATAAAAT CTCTAAACAC ACCAATGTCC CATTCCAAAA TATTGCACAA CATTCTGAAT ACAAACCCCT TGATTGTATT
 CCTCCINCAC TAAAGAAAAA AGTTCATGAC CCTGCTCCCC GGGCTCCTCT CCAGGCTTGC CTCAATGCCC CCTTCCCATC
 CCTAGGGAGA AAACIAGAGA ATCTATAACT CACTGCAITG AGAAAAACAC ATCATTCTGG ACTAACAGTT TTCCATTCTT
 CAGANGGNTA ATCCACCTTT TGGATTGTGT CCTGGGGAAA GAGGGGTAGA TAGAGGGATG

SEQ ID NO:1913: (Length of Sequence = 361 Nucleotides)

GAGACAGAGT TTTGCTCGTT GCCCAGGCTG GAGTGCAATG GCGTGATCTC AGCTCACCAC AACCTCCACC TCCGGGGTTC
 AAGCCATTCT CCTGCCTCG ACTCCCGAGT AGCTGAGATT ACAGGCATGT GCCACCAGC CCAGCTAAGG CTTTGTATTT
 TNAGCAGAGA TGGGGTTTCA CCAATGTGGC CCGGCTGGTC TCAAACTCCT GACATCACAT GATCCCCCG NCTCAGCCTC
 CCCAAGTGCT GGGATTACCG GTGTGAGCCA CTGCCCTGGG CTCTCCAGTA CATTTTLAGG GGGACGATCA ATGAGGATTC
 TCTTCTCTGA GTTACTGCAT GTGTACAGT TTATAATCCT T

SEQ ID NO:1914: (Length of Sequence = 409 Nucleotides)

GGGGCCCTTA CAACTAGGTA TGGTGGATAT TGCCCGACAG ACGGTGGAAT TTCTCTACGA AGAGAATGGT GGCATCCCAA
 GAGACCTTTA TCTTCCCACC ATGAAGACA TTAAAGACGA AGCAACAAG TTCACAATTG ATAAAGTTCC AAAAGGTCTC
 ACAGTAGTAA CCCGCTCTCC AGACAGCAAT AATGTAGCCA GCAGTGCTGT TGGAACTGCT CTGCCAAAAT TTGCCATCCG
 AGGGATGCTG AAAACCTTTG GCCTTCATGG AGTCGTCTTA GATGTGTGATT CAGTGAATGA ACTGGTGCAG GTAGAAACGT
 ACCTCCGCAG TGAAGGTGTG CTGGTGCAT ACTTGGTATC CTATTTGACA TGTTGGGAAA GGGCCCCCAG CAGGCTACCG
 AARGGACTT

SEQ ID NO:1915: (Length of Sequence = 402 Nucleotides)

ATGGTTTATA GCAGGAATAC TTGTTCTGAA TGACTTGGAG GGAAAGTGTG TGTGTATATG TGTGTGTGTG TGTTTGTIAG
 TTTTGTGAG GTAGGGGAGA CTATTTTGT GTTTCAGTCA CTCCAATTAT TGCCACAATG CACTTTCCTT CATAACTGCC
 CCACCAAAGG TCTTAAAAGC CATTTTGGGA GCCTATGCA CTGTGTCTC CTACTGCAA TATTTTCATA TGGGAGGATG
 GTTTCTCTT CATGTAACTC CTGGGAATTG ATTCTAAGGT GATGTCTTA GCACTTAAT TCCTGTCAA TTTTGTGGT
 CTCCCCTCT GCCATCTTAA ATGGTAAGCT GAAACCTGGG NCTACTGTGG CTCTAGGGGG TAAGCCCAA AGGCCAAAA
 AA

SEQ ID NO:1916: (Length of Sequence = 382 Nucleotides)

GAAATGAGAC TTTATTCTGA AATTATTAA AAGAACAGAG ATGCTCCATT TGGCTGCATG CAGGGGGGGC GGTGGGGGG
 ACAGAGGGGA GGACAGGGG TCAGCCAGGG GGACCGTGTCT TCTTTCCAC GCAGGACACT GTGCATGGGG CTCTGGGTGC
 ATCTGCCCAT CTGTCTATGG GCCTGTGTGT GTGTAGAGG CCAAACACAG AGAGCTCCGT GGGTCTGTGT GTATCCAAGT
 GCTAAAAGGC AGGCTGGCTT TCTGGGGCCC ACAGCTGGCG GGCTAGTATC CTGGAAGGTT TCACTTGGTG GCTTGGCCTA

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CCAGTCCTGG TGCCCACTTC TNACANCTGC CCTCCTGAG TTCACACTGG AGTCCTTGCA GTCTGAAAC CACAAGGCCT
 NCCTGAACCC TGGGTCAGGA GAGAAANACT TGGGGAGGGG AAAGGACGGC GTGGGCTACC CATKACGGCT CTGAGTTCTT
 CCTGGGGCTT GTGTCTTTTC CTGGGCAGAA GAGGGCACAG CCAAAGGCAA

SEQ ID NO:1906: (Length of Sequence = 415 Nucleotides)

GTCACACCTT CATTCAGTGA GGAAGAAATG CTTCCTCTT GGAATTCAC AGCATCCCAA TCTGACGTTG TACCCGTTG
 ACACTGTTTG TGAGCCCCAA GTTTCACGA GCTCTTGCAA GTAAACGGAC ATTCTGCACA TTGTAGACA GCTGTCTTC
 CAGATAAGTG GATGTTTTCT ATGTGACGAG AGATGCTACG TCGATGCATG GTGAGGAAAG GACAAAAGGG GCACTGGAAC
 CTATTCATGA ATCTNCTAAA TGAATCCCC TTGGTCTCCA ATAATTGTT GCCATCTGAG CCCATCAGCT GCTCTGCAGA
 CAGGCTGAT GTCTGGTGAT CCACAGCACT TAAACCAITC TCACTTGTCT ATTTCAITTA ACTCTTCATC AGAACTAGAG
 TCATTAGCAT GCTGT

SEQ ID NO:1907: (Length of Sequence = 214 Nucleotides)

TGAAATCTG TACGTGTCAA CTTTGAAATG TATGTGTGT GGTGGGTGG TGGTGATG ATACGGTTTG GATGTCTGTC
 CCTCCAAAT CTCATGTGTA ACTATAATCC CCAATGTTCC AGTTGACGTG GTGTTTGGTT CCATGGCGGG GTACCCTAGG
 GATTCACTG TTTCTTCAC TTCCCTTTC ATCTGAGATC CTGCTGAAA CCAC

SEQ ID NO:1908: (Length of Sequence = 410 Nucleotides)

CAGGAGAGCT GGGCACATGT CCAAGCCTG TNAGTGGCCC TCCCTGGTGC ACTGTCCCG AAACCCCTGC TTGGGAAGGG
 AAGCTGTGG GTGGCTAGG ACTGACCTT GTGGTGTTT TTTGGGTGGT GGCTGGAAC AGCCCTCTCC CACGTGGCAG
 AGGCTCAGCC TGCTCCCTT CCTGGAGCG GCAGGGCGTG ACGGCCACAG GTCTGCCCG CTGCACGTTG TGCCAAGGTG
 GTGGTGGCG GCGGTAGGG GTGTGGGGC CGTCTCTC CTGTTCTTT CTTTCACCC TAGCTGACT GGAAGCAGAA
 AATGACCAA TCAGTATTT TTTAATGAA ATATTATTG TGGAGCGTN CCAGGCAAAG CCTGGCTGTA GTAGCGAGTG
 ATCTGCGGG

SEQ ID NO:1909: (Length of Sequence = 339 Nucleotides)

AAAATTAAAT CCAAATTTTA TTAAGGATTT CAGGTACAT ACTTCAAATT TCTAGAATG AATGGAATCA TTTTGGAACT
 GGAAAAATG CATAAACA GACGTCCCT AAAACTTCAA TTTTATAAG AAAATTCTT TGCAAACCAC ATCCCTTTA
 TGTAACAAGA CTAGGTATTA TCTACACCT CACTTTGGCA ATAGCTATTT CCTAAAGAAT GAAAAAGATG ATTTTCTAC
 TTCAGTTCAT TAAAAATGG ATTCTATCT TGAAGTTCAG AAAAGCTGC ATTTGATGA ACTATGGGT AAAAAA
 GCACATAGTG TCTAATCAA

SEQ ID NO:1910: (Length of Sequence = 439 Nucleotides)

GGCCAGGGA GCACCAATCA CAGCAGGGC TCTGGCCAG GTGTGGCAG CCCAGGCCTC CATTGCTAA TGATTAATAC
 ACTGTTTGG CTGGCCAGTT TTTATGTCAT GCAGCTTGAC GATTGAGCAC AGTCAGGCCT TTGTATTAAA AATGAAAAAT
 GAAAAACAA ATTCAAACC TATTCAAATG GGTCTAGTT CAATTGTGTT AGTATAAAT GTCATAGCTG GTTTACTGAA
 AACAAACACA TTTAAATTT GTTACCTCA GGATGACGTG CAGAAAAATG GGTGAAGGAT AAACCGTTGA GACGTGGCCC
 CACTGGTAGG ATGGTCTCT TGTACTTCGT GTGCTCCGAC CCATGGTGAC GATGACACAC CCTGGTGGG ATGCCGTGT
 ATGTTGGTT AGCGTGTCT GCATTGTCTA GGAGTGAAC

SEQ ID NO:1911: (Length of Sequence = 342 Nucleotides)

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ACTTATTATT GTTAGCACAA CATTACCAGA AAACGKTAAC GGCAGCCAAG CAGGACAGAC AGTTAAG

SEQ ID NO:1900: (Length of Sequence = 405 Nucleotides)

GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGWTCC CGAAGCACTT CTCTGCCCCA GGGGAGTCCG AGCCACAGTT
TTCGTATCAA CTGATGATTC TRACCGCTT CTTTCTCTCT GGGGGGTAAG ACACCTGTGTG TTGAGCTCTG GGGATGATGG
AGAAGCACTC CTCGGCTAG GAGTCTGAGG CAAAGCTTTC GGTTCGCGG AAGAATCACA TTGCTTCTC CCTCTAGATG
GCGTCTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC CTCGAGGGAG TOCCAGACCC ATCTCTAAGT
CCTGGAGAAG ACCCAGACCT GCTTCTCCTT GATGGAGTTC TGGTAAACCA TCCTTCATTT CAGGAGAAGA TGCAGACTAC
TTCTT

SEQ ID NO:1901: (Length of Sequence = 244 Nucleotides)

ATRATTCATA TGCTAGTTTA TTTATCTTAT TATTGAGAGA TAATTTCAATG ATGACAGTTA TCAATAATCA ATTACAATAT
CAAGAAATTC AAAGAACAAA ATCTTGCGA GACTATGCTT TTGTATTTGG ATTTAAAAAG TATGTGATCT CATTTCACAA
TACCAAGCTG AGAGGCCATT TAGACTATCT CTTTGCTAAT TTTTGCTTAC TGCTGTAGGG AAGAAGATTT CCAATGAMCT
TTAG

SEQ ID NO:1902: (Length of Sequence = 329 Nucleotides)

TAAAAATAAA AAAATAAATA AAATTTTAAA AATAATAAAA ATTCACTATA TACACATATA AAGAAATAAA AAGAAGTCTC
AGTTGCAGCT ATTTGTCAAA ATTAATATCC ATTTCTTTT ATATACGGTG AATATTGCGC AATTATAGAT CTGGATTTTA
AACCACCTAA TGAAGCGGCA ACACCAGGTG TTTTAAGGTG TTGGCATTCT TCGCTGATTT GCGTGTCCG AATGTTTACA
TTATTTAATC TTGCAAAAAT GGTCTGATG CACTTGGGAT GTGAAATGCT GTCCCGTTTT ATTTTTTTAA TGTGTGTATC
CTTGGGTGT

SEQ ID NO:1903: (Length of Sequence = 421 Nucleotides)

ATTTTATATT CCACAGTCAG GTGGGTCTGC GATASTCATT TAATGTTAAA CGCCATCAGG GGCTCTCCT CCGTTTCTG
CCAGGGGCTT TTCTGTCTT CTCTTGGTC ATCATCATCA TGTCTTCTT CTCTCTGTG GGCAGATCTT CTCTGGTGGG
GGCTGGCTGC TGGCTCCAG GGGGCATCCG CAGTCCGTCT GGCTGTCTCC TCCTGCAGGC TGGGCAGCTG GCCACCACTT
CTCGACTCG ACCCTCCAA CAAGCATCGC AGGGCACTGT CCTCGGGGT ACAGACCGTG GTCCCAATT CGCTACCACT
CTGTCCACG NCATCCAGG TACACGAGCT GGTGTAGGC CGTCTGTCT TGGGGCTCGA GGCTCTTCT GCTGGTCTC
TTGGACGGGC GGGTAAATTC T

SEQ ID NO:1904: (Length of Sequence = 423 Nucleotides)

GTCTGTGGC CTGTCTGAA GTGACGGTGC AGCCAGGCTG CTCCTGCCC AGCAACCCG AAGCCATTGT GCTGGACGTC
GACTACAAGT NTGGGACCCC GATGCAGAGT GCTGCAAAAG CCCCATATCT GGCCAAGTTC AAGGTGAAGC GATGTGGAGT
TAGTGAACIT GAAAAAGAAG GTCTGCGGTG CCGCTCAGAC TCTGAGGATG AGTGCAGCAC GCAGGAGGCC GACGGCAGAA
GATCTCCTGG CAGGCAGCCA TCCTCAAACT GGGAGACGAC TTCGGCAGG ACATGCTGGC CCTGCAGATC ATCGACCTCT
TTCAAGAACA TCTTCAGCT TGTCGGCCTG GACCTCTTTG TTTTCCCTA CCGGTGGTG GCCACTGCCC CTGGGTTCGG
GGTGATCGAG TGCATCCCG ACT

SEQ ID NO:1905: (Length of Sequence = 370 Nucleotides)

CAGAACGAGA ACATTTTTAC TCTTGGGCT CTGGGAAGG CCAGGCAGAG TGCAAGGTGT CCACAGGAGG GGTAAGCAGA
GAGGAGCTAC AGGGGGCTGC AGTCTTAGTA CCTGTGGG GAGGACTGAG GGATGGTGAG TTTGCTCTCC GGAGGGGGCT

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CCAGATAGAG TTTCTGTTTT TNAGTTTTAC ACGTGCCACA TCAGGGAAG TTAGGTTATG ATTAAAGCAA GAGATGATAG
 ATGAACAAAC AAAGAAACAA CAACAAAAG CCCATGCAAG AGGCAGGAAA AGAGGCTGAC TGGTTAAAGA ACAGGCCAGA
 TTGGACAATA CTGATCAAGA GGGGTTTACA TTGAAAGAA CAGTGCTTTA TTCCTCTACT GACTAGAACT AAAGGGATTT
 TGGCCGGGTA CGGTGGCTCA CACCTGTAAT CCCAACACTC TGGGAAGCCA AGGTGGGCGG GTCACGAGGT CAGGAGTTTG
 AGACCAGCCT NACCAACATG GGTGAAACCC CATCTCTACC CAAAATACAA AAACTTTINC CGAGCGTGGG CCCGGCGTTG
 GTTGGCTCAT ACATTTNATN CCCCNCCTTT NGGGGGCCCA NCCGGGCGGT TCACCTTAGG GTCAAAGGGT NCGGGNCCT
 TCTTGGC

SEQ ID NO:1894: (Length of Sequence = 283 Nucleotides)

GGTGGTGAAG TGGGCTCTGG AGAAGCTGGA GCTGACCAAG TACGAGACA AGCCGGCTGG CACCTACAGC GGCGGCAACA
 AGCGGAAGCT CTCACGGCC ATCGCCCTCA TTGGGTACCC AGCCTTCATC TTCCTGGACG AGCCACACCAC AGGCATGGAC
 CCCAAGGCCC GGCGCTTCCT CTGGAACCTC ATCCTCGACC TCATCAAGAC AGGGCGTTCA GTGGTGCTGA CATCACACAG
 CATGGAGGAG TCGAGGCGC TGTGCACGCG GCTGGCCATC ATG

SEQ ID NO:1895: (Length of Sequence = 234 Nucleotides)

ATGTCCATTA GCCTCATTG TCATCTGAGG GAGCTGGTGA GAACAGCCTT GGCGTGAAGG CATCCCTGGT AGAAGTCGGG
 GGAGATAGAT AGTCACAGT CCCGAGTTGG TGGAAATNGG ATNGGAGTAG GGAGAGGCTN GAACAGACCC TTCCCCATTG
 ACCTGNGAA TTTCTCTC CCCTGCCCCT AAACACTTTA TTCCATCAC AGGGGAGAAA TNCCTGCTGAG AAGG

SEQ ID NO:1896: (Length of Sequence = 285 Nucleotides)

CTTTAAAGTG TAATAATATG ATTTTATAA AGAAATTTAT TACTGTGTC AAAGGTCCTT TTAAACCAGT TTAGATTCA
 AGAAAAATA AATGGAAATC ATCGAAAATT CATTTCACAT TAATGGTCTA AAAATAAACCC AAAGGACATT ATGTGTGCAT
 GTGTGTATAA GTGCACACAG AAATATATAT NCATATGNG ACTATATACA TGTGTGTATA TATGTGTATA TATACATNCA
 CTTGTATAAA TGTATATACA CATATACCTA TAATGTGTGT ATGTG

SEQ ID NO:1897: (Length of Sequence = 288 Nucleotides)

GCAGGTTTAT GTTTTTATTT ATGTATTINA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTCAC AATATACTTG
 CAGAACTGTG CCTGGSGSAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AAWCTCCCCC
 AAACCCTAAA GGCATCCTTT TCGTAGTGTG TGTCCTAYAG GTATGGCTGC TGAGCACCAG GGGCTGCTCA CCATGNTCCC
 AAGAAGCAGA GTCANGGAGG CAGACAGCAG GGTATTATTAA GGTGCACA

SEQ ID NO:1898: (Length of Sequence = 398 Nucleotides)

CAGAAGTAAA AGATTTTTAT TGTTCATAG ACACCTCIGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
 TTTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
 GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGATGG AATTTAGAA
 CAGAGGAGGC AGGGTGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CAAGCTTTGA
 GAAAGCAATG AGCTCCACCT ACTCAGCAGA CCCACGGGTC GTCCCCCTGG ACGTGACTTA GCAGTGACCT TGCCTGCC

SEQ ID NO:1899: (Length of Sequence = 227 Nucleotides)

CATGGGGACC CGGTTTATT TTATTAGGAA GGAACAACC AAGCACCCCA TGTTCCTGCC CGGMACTCCC GGGGGGAACA
 TGCCAAAMAG CCGGGGATCG AACCCAGCCC ACCTGTCTGT GRGGKCCCTT CCTTCTCAGG CCACAGAAAT AAACCCGTGT

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CATCGGCATA GTATTTACAT CATGGGTATA GGCAAGINCT ACAAATCAGG NCTTINCCTT GGGGATGGAT GTTTGGAGCT
AGTTTACCAG CACACCAAGT GGTAAAAGTG AACAAATACT TTTTGTATCC CACAGAATCT TAAAAAATAC TTTACTTCGA
AAATGTCTCT ACTAAGTAAT CATATATATA TATATATNTG TATATATA

SEQ ID NO:1887: (Length of Sequence = 332 Nucleotides)

CTCGTTCACT GCCCGCCAAC TCCCATTCCA ACTTCCTTTT TACACTGGAT GTTCTCTATCA CATCTGAGG ACCACTAACC
CACCAGCAAG TCCTCCCTG ACACACATTC ACGTAGGTCC ATACCCCTCA GAGTCCTAAA GGGTTAATGA GAAGCCACCT
CAGCTTTGGT GAATGGAGCC CCAGCCCCAA ATCCCCTCCC CTGCAAATA TGGGACAAGT AGGGAGAGTC TGATGGAGGC
ACCAGGACAA CTACAACAAC CTCTTACCCC TCAGCTATAG ACACCTAGAT CAGGACAGAG GGATGCATAT GCCCTCTCCA
CCTTAACACC AA

SEQ ID NO:1888: (Length of Sequence = 224 Nucleotides)

AAGAGCTGAT TGAGGCTGCC AAGAGGAACG ACTTCTGTAA GCTCCAGGAG CTGCACCGAG CTGGGGGCGA CCTCATGCAC
CGAGACGAGC AGAGTCGCAC GCTCCTGCAC CACGCAGTCA GCACTGGCAG CAAGGATGTG GTCGGCTACC TGCTGGACCA
CGCCCCCCA GAGATCCTTG ATGCGGTGGA GGAAAACGGG GAGACCTGTT TNCACCAAGC AGCG

SEQ ID NO:1889: (Length of Sequence = 261 Nucleotides)

CACTTTACTG AGTCACACCC AGCTGTAAAC ATGTCACCGT GAGANTCCCG CCCCCACCC CCAGGCCGCA CAGTCOGGA
TGAAATGACA GGGGAGCGGG GAGGGTCGCC GGAGCGGGTG CCAAGCAAGG CAGGGCAGGC AAGTCAGCA GGCGCTGAGT
TTCCGGGAGG AAGCCCGGAG GAGGTGGGGT GGGCAGGAG CGNGGGCTGG GGACCCGGCC GAAGACCAGG GGGCCAGGA
AGCCTCTTTT CGAAGGNC T

SEQ ID NO:1890: (Length of Sequence = 312 Nucleotides)

CTGCGAGACT ACGAGACGGT GGTCAAGGTG AAGCCCCATG ACAAGGATGC CAAAATGAAA TACCAGGAGT GCAACAAGAT
CGTGAAGCAG AAGGCCTTTG AGCGGGCCAT CGCGGGCGAC GAGCACAAGC GCTCGTGTG GGACTCGCTG GACATCGAGA
GCATGACCAT TGAGGATGAG TACAGCGAC CCAAGCTTGA AGACGGCAAA GTGACAATCA GTTTCATGAA GGAGCTCATG
CAGTGGTACA AGNCCAGAA GAAATGCAC CGGAAATGTG CCTACCAGAC AGAGAAGATT ACAGTATGTG GG

SEQ ID NO:1891: (Length of Sequence = 298 Nucleotides)

CCTAAAGGCC AGGCAAGGCT GATTCTCCAC TTCCACATGA GACAGAGCTG ATTCTGCAGG GAAACGGCTG GGGAGGCTCC
ACCTCTTTCC TCCCCACAAC CATTTACTGG GAAGTGTGT ATACTTGGCA GTNIGGGAGG AAGGTACTTG GAAGACCCTG
CCAGCCATCT CCCACCCAGA CTCTTCTCA CCAGCACAGT CTTCAAGGCT TGGTGGGAAA GGTGTGTGGG AGTGGAGAAA
GACAAAGGGC CCTTCTTNA GAGAGGAGCT GCAGAGAGGG GCAAAGGGT TCCTAGCC

SEQ ID NO:1892: (Length of Sequence = 333 Nucleotides)

CTCCAAGGTC ATCCAGTCCG TCGCTAATTA TGCAAGGGT GACCTGGACA TATCTTACAT CACATCCAGA ATTGCAGTGA
TGTCATTCCC AGCAGAAGGT GTGGAGTCAG CGCTCAAAAA CAACATCGAA GATTGGGTT GTTCTGGAC TCCAAGCACC
CAGGGCACTA TGCCGTCTAC AACCTGTCCC CGAGGACCTA CCGGCCCTCC AGGTTCACCA ACCGGGTCTC CGAGTGTGGC
TGGGCAGCAC GGCGGGCCCC ACACCTGCAC ACCCTGTACA ACATCTGCAG GAACATGCAC GNTGGCTGC GGCAGGACCA
CAAGAAGGTC TTC

SEQ ID NO:1893: (Length of Sequence = 487 Nucleotides)

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GAAAAACAAG GAAANTAGGC AACAACTGC AATGGACACT TTTCTCTACA GAACCTTTTC AACCTGAAT TGAATTGTTT
 CCTATTCAAT TNCTAATAAA AAGTACTTT GCAAGATATA AGGAAATACT GTCCCAAAGA TTTTCACTAG TCATTCAATC
 CATTAAATAGG ATTTGAAAAG GCATCATTAC ACAGGGTTGA AAATACTCTG GAATGAGACT GCITTACAGT CAGAATGCCT
 GAGTTTGTAG GCACTGTTAC TTCTAAACAT CTCTAAGTTT CTATTNCTC ATCTAAAGGA GTAATATTAC TTTCCTTAAA
 AGGTTG

SEQ ID NO:1879: (Length of Sequence = 222 Nucleotides)

GAAAGGGAGA GGTTGCAGCG AGCCAAGATC GTGCCACTGC ACTCCACCT GGGTGACAGG GCAAGACTCC ATCTTAAAAA
 AGAAAACCCA GGAGTCTTTG GTTAATGTAG TGCAGGACTC TGAGCTCCCG GGAGGACCTT TCCCTCCAG ATGAACTGTG
 ATGGACCAGC CCAAGGAGG GGAGAGAGCA CTNGGCCAT AGTGGTGGTG GATCTTCTA AC

SEQ ID NO:1880: (Length of Sequence = 244 Nucleotides)

GACATGAATG GTATCTCTCT GGGGTATGAG ATCCGCTACT GGAAAGCTGG GGACAAAGAA GCAGCTGCGG ACCGAGTGAG
 GACAGCAGGG CTGGACACCA GTGCCCGAGT CAGCGGCCTG CATCCCAACA CCAAGTACCA TGTGACCGTG AGGGCCTACA
 ACCNGGCTGG CACTNGGCCT GCCAGCCCTT CTGCCAACGN CAGGACCATG TAAGCCCCCT CCGCGGCGAC CTCTGGGCA
 ACAT

SEQ ID NO:1881: (Length of Sequence = 156 Nucleotides)

GTACAGGGGA GAGTTGAGCT GTGACAAAGT CAAACACAGG CCTTGGCCAC CCACAGGAGC TCTGCAGCTG GGGTGGTCTT
 GAAAGTTGTC TCAGTGAAG CAAGGTGCTG AGCTTATTAC CCCAGCAGTC ATTGTATTTA GGCTCCGTGT GGTACC

SEQ ID NO:1882: (Length of Sequence = 210 Nucleotides)

TTTTTTTGA AACGAAGTCT CAGTCTGTCA CCCAGGCTGG AGTGCAGTGG CACGATCCCG GCTCACTGCA ACCTCTGINT
 CCCAGGCTCA AGCTAGTCTC CTGCCTCAGC TGCCCAGCA GACGGGACTA CAGGCACCCC CACCACGCCC GGCCAATCTC
 CAAATGGTTC TTTTTTCCG GAGTAGTAAG TTACAATATG GGAGATTATT

SEQ ID NO:1883: (Length of Sequence = 214 Nucleotides)

GTGATGAATA CATCCAGTTT TCCAACCACA TTCCACCAGG TGGGTGTTTG GCTGTGGGAC GCATTATGTA ATCTTCGTTG
 CCAGGAAATT TACCTTCCTA ATTACATTTT GCAAATGTTT ATTTGAAGCC GCCTTCTTGG AGCTCACAGT AACTAGGAGG
 TGGCTGCTGG AAGCCCCAGG GCACCGTGG AGGGACAGGG GAACGTCCA GACC

SEQ ID NO:1884: (Length of Sequence = 211 Nucleotides)

ATCTTTCGCT CTATGTGCCA TCACCTGGAC ACTCTAGGTA ATACCCCTG TTGGGCAGGG GTGAGCTCCC AAGGCCTCAG
 GCAACCCAGC TCCCATGACT TTGCTGGGCT CAGCCACAT AACTGTCTC ACAGGATAGA GTGTACACT GGTGCTTACA
 GCTTTCCTGG GCCAGTGTG CATGCTGCCA GTGGCTGCAG CAGCAGCCCC A

SEQ ID NO:1885: (Length of Sequence = 212 Nucleotides)

ATTAGCTGAA TTCCGCTGTG GCGTTTGGG TAGGCAAAGG AGACATCTTG GAACTGGACA AGGCCCTCCA AGTGTAAAGG
 AGTCAACAGA CCACTGGGTG GGCAGCGAGG GGTGCGGTCC AGGTACTCAA ATATTTTCTC TGAGGAGCCC ACAGCCTTCT
 GTACTCTGGG GTAGATGGAG AGCAGTACCT CCACAGCCTG GGTGAACCTG AT

SEQ ID NO:1886: (Length of Sequence = 208 Nucleotides)

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CAGCTGCCTC TCGCCTTTG CACACACAGT CCTTGGCACA CTTCTCACAC TNCGCAGGCA GCAGGAGCAG CAGCTCTTCT
TGCAGGAGGT GCATTTGCAT CCTCGCACT TGCAGGAG

SEQ ID NO:1872: (Length of Sequence = 271 Nucleotides)

CTTGCCATCT TCACAGCCAG AAGCTTCCTT GCTTCATGCG CAGACCCCTCG TGACTCCCCT TCCCTTATAA GGGCCCCCAT
GATTACTCAG GGCCACCTC AACCATCCAC GGTCACTCTC CCACCAAGAA ATCTGAACT GAAGCACAGG CGCGGGTCC
CTTTTGCCAC GCAAGGTAAC ACTTTCCAC GTCTGGGGT TCCAAACCTG CACATCTCTG GGGGCTGTTA TTNCACCCAC
CGTCATCAGT GAGGCGCCTT NAGGAGGGG T

SEQ ID NO:1873: (Length of Sequence = 332 Nucleotides)

CAGGGTATAG TGCAGTGGCG CAATCTCGGC CCACCACAGT CTCGACCTCA TGGGCTCAAG TGATCCTCCC ACCTCAGCCT
CCCAAGTAGC TGGGACTACA GGCATCCTCC ACCATGCCCA GCCAATTTTT TCATTTTTC ATAGAGAAGG GGCTTCACCA
TGCTGCCCAG ACTGGTCTCG AACTCCTGGG CTCAAGCCAT GGAATTGCCT TGGCCTCCCA AAGTGTTAGG ATCAGAGCCG
CGAGCCCCTG GACCGGCCT ATAGTTTTTG TTTCGCTTTG TTTTGTGTTT TTGAGATGGA GTCTCACCTC GTCANCCAGA
TGGGAGTGCA GC

SEQ ID NO:1874: (Length of Sequence = 317 Nucleotides)

CTCTCCACCT CAACCTCCAG CCCACCTCCA GGCTGGGGAA GGGGCTGAGT CTCCCCCTCC CATACATACC TCACCCGGCC
CCCAGCCAC AGAGAGGCTG AGGGAGGGG TCTGGGTCTT CCTCCATCCC TGTACCTGCT TCTTCCCTCT TCATTTCAC
CTCTAGATC TTTCCCCCA CCCAGCCAC CTCCAGGCTG GGAAGGTTGA GGAATTCCTT CCTCCACAC CTTACCCAC
CTACCTGCA GCCTGTGCC TGGGCCAGGA GAGGCATGGG TGAACAACA GACCCACAAC CCCGACCT GCAGGCT

SEQ ID NO:1875: (Length of Sequence = 185 Nucleotides)

GTGTTCCACC CACCTCGGCC TCCCAAAGTG CTGGGATTCC TGGCGTGAGC ACGCTGCGCC TGGACAGTCT GCCCTAGAT
GAGTTGCCA GCACGGTACA GCTACTGCCT GCGCGACCC CAGCCCTGA TTCTACCGC GCTCGGCAGG GGGACGGCA
GGGAGAGGTC CAGCCGCGG GCAAG

SEQ ID NO:1876: (Length of Sequence = 214 Nucleotides)

CCTGGGGACA AAATAGTCAG CAAATCTCA AGGGGAGAAA ATAAAGTACT TCCCTTCTGT TAAAAAAG TCAAGAGACA
AATCTTCTT CCCCCATTCT CACTAATAGT TATTGAAGG GAAAAAACA AACCCACAA CTTTTTAAAC TAAAGATAAA
AACAAATGAA AATGAATAAG ATCCAAAGAA TGTCTTTGT TACTCTGCCT TATG

SEQ ID NO:1877: (Length of Sequence = 340 Nucleotides)

TTTGAAGAAG AAGAAGTTGA ATTTATCAGT GTGCTGTCC CAGAGTTTGC AGATAGTGAT CCTGCCAACA TTGTTATGA
CTTTAACAAG AAACCTACAG CTTATTTAGA TCTTAACCTG GNTAAGTGCT ATGTGATCCC TCTGAACACT TCCATTGTTA
TGCCACCCAG AAACCTACTG GAGTFACTTA TTAACATCAA GGCTGGAACC TATTTGCCCT AGTCCATCT GATTCATGAG
CACATGGTTA TTACTGATCG CATGAAAAC ATTGATCACC TGGGTTTCTT TATTTATCGA CTGTGTCATG ACAAGGAAAC
TTACAACTG CAACGGGAGG

SEQ ID NO:1878: (Length of Sequence = 326 Nucleotides)

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CATTTCTGTT ACATTGAGAC TTCAGTCACC AACATCTGGT GGCAGAGATA CAGGTGTATG AACATTTCT ATTTACCCAA
 ATATGCCAGT TCCCAAATAG GATGACTGCA TTTAGTGTTA AACTGGCTTT TCTCATTAGA TACTCTAATT GAGGAATATT
 TAGCTTCTTG AATAGAAACC ATCCAAATGA TGTTTTTTTT TTGATATGTC TGTAACATA AAAATCAGCA AATAAG

SEQ ID NO:1866: (Length of Sequence = 424 Nucleotides)

TACGGGAAGG CGGTGTTTGG AGGCTGGAGC CGTGCCAACG TCATTGAGAA AATGCTCACA GACCGGCGGT CTACAGACCT
 TAATGAGAGC CGCCGTGCAG ACGTCTTGC CTTCCTAAGC TCTGGCTTCA CTGACTTGGC AGAGATTGTN TCCCGGATTG
 AGCCCCCAC GAGCTATGTC TCTNATGGCT GTGCTGACGG AGAGGAGTCA GATTGTCTGA CAGAGTATGA GGAGGACGCC
 GGACCCGACT GCTCGAGGGA TGAAGGGGGG TNCCCCGAGG GCGCAACCA GCACTGCCTC CGAGATGGAG GAGGAGAAGT
 CGATTCTCCG GCAACGACGC TGTCTGCCCC AGGAGCCGCC CGGCTCAGCC ACAGATGCCT NAGGACCTCG ACAAGGGTCA
 CCCCTCCTCC ACCCTGGACT GGCT

SEQ ID NO:1867: (Length of Sequence = 256 Nucleotides)

AAACAATTGA AATCCACAAG AAATTACTAA CAGCACGTGT TTACGTTTTA TCCTGAATCA TACATTTTAA CAATTCACAG
 CTACAGGAAA TCTAGAACAA AATCAAATAT TCATCACGTT GGGTTGAAAA GTTGGAAGAT TTGTCATCTT ATTGAAAAGA
 ATTTTTCAAA AATGTTTCTG TACAAATGAA TGGAATTGCA CCAGGCTGCC CATGGACACC AGGTGTGGCC GCTTCCCAAC
 GGTCAACCCAC CAGCTT

SEQ ID NO:1868: (Length of Sequence = 297 Nucleotides)

CAAGGTTTTT TTTTATTTGT AGCTATAGCT ACAACTTGGC AGCATGGGGG AGGGTGGGAA TGTCTCTGGAG GGTCTCCAG
 CCTCCGCAA GCAGAGTACA AAGGCTGCTC GGGGGGCCGG CCGAGGGCGC GGNTGCAGCA GTGNAAGCAG CAGCACTAAA
 CCTGGTGCCC CCTCAGGTG GGGTGTCTGG AAGACGGTGG GCAATCCCTG CAGGATGGGC GAGGACCAGA CCCCAGGGCG
 GGGATCCTGC ATCCCTAGAC CATGTTGGGT CCTGGGTCAN GGCACCTINGG NATGCTA

SEQ ID NO:1869: (Length of Sequence = 470 Nucleotides)

CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC GGTGAGGAGG TATCCCATCC CTCCTCCAGA TGCCAAGGAG
 CTGGAGCTGA TGTGTTGGTG CCAGGTGGAA GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCCG GGAGGCCCTT
 TAGCTCATAC GGAATGGACA GCGACCTCC CATGGCAATT TTTGAGTTGT TGGATTACAT AGTCAACGAG CCTCCTCCAA
 ACTGCCAGT GGAGTNTTCA NCTGGAATT TCAAGATTTT NTGAATAAAT GCTTAATAAA AAACCCCGC AGAGAGAGCA
 GNTTTTNAAG CACTCATGG TTCATGCTTT TTATCAAGGG GATCTNGATG CTGAGGAAGT NNGATTTTTT CAAGGTTGNN
 TCTGCTNCAC CATNGGGCTT TAACCAGNCC CGGNACAACC AACCCTAGGN TGNIGNGTIT TAAGNGTTTT

SEQ ID NO:1870: (Length of Sequence = 344 Nucleotides)

AGAGATTAGA TTTGTTAAAC ATCTAGGTTA AAATGGTTAA AAGGATTTTC ATACAATTTT AGGCACTATA CACGTTGTTT
 ACAACAGCAT TGGTACTTGG ATATGGGGAA AGATAAATCC GACATTTTAA TATCTTGATC AATTTGTGAC ATTCAAATA
 ATTCCATTIA AGAAACATTA ATCAAAACTT AAAGAGACAT ACCACTAAGT ATCCACACA GTATACTGAA AATAAATATA
 GNAATACAAC CAGAAGTCTA CAGNTACCA CAGTAGACAG ACTGGTGAAG NCCAGCTTT TCATGGGCAG TNAAGGGCTC
 TGGGCTAGAT TTGGGTGTCA ACTG

SEQ ID NO:1871: (Length of Sequence = 278 Nucleotides)

GGATTATTTG TCATTCCTCC AAGGTCAGCA GGGGAAGGGG ACACCAGCCA CACTTCACCA CAGGCATAGG TGGCACTGAG
 CCACCTGGCA CTATCTCCAC GTGCTCCACA CGGAGGGGTG CCTTCTCACT GGCAGCAGCT GCACTTCTCT GCTTCTGCT

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TAAGACTTCC TGTTAGTAAA AGCTACCTCA TGAAAAGTAT TGATGTTAAT TGCCAACATT TAGACTAGCT TTTGTTACCG
 TTTTCAGTTAT TCAATTTAGT CAGCACATGT TTGAGTGTCT TACTGCAGGT GAATAATCCA TGATTTCTGC CCCAGAGTAG
 TTCATAAGAC TGGTAGGATA CATAGATTTG TAAATAAATA ATTATAATTC TGGGCAGTAA GTGCTGCTAT AGAAGTCTCT
 ATAAAGCAAT GTGCAACAC AAGAAAAGGA GCCGTTAATT CCTTATAGGG AAAGG

SEQ ID NO:1859: (Length of Sequence = 326 Nucleotides)

CTTTATTTAG TGCTGGGGCT TTGGAAGCAA ATGTACCTGA GMITGAATCT CAGGGATAAC CTTTGTACTG TGGCCCTGGG
 TAAGTTACTC ACTGTCTCTG AAACCTCAAG TTCTTCATAA ATAACCTAAG ATGGACAATC ATAACCTCTCT CTTGGATTGA
 GGTAGGAGAA TATGGTGGAG GCAGGGAACC GAAGGCCATT TCACTCCAAC TTCTTAGAAC TAAATTAAAA GGAAAACCCCT
 AATTTTCCAT GCCTAAGTAA CAAAAGGACC AAAGGTTACT CCGTTTGCAA ACTCCACCT TTTCTGCATG GCAGATGGGA
 AGTTGG

SEQ ID NO:1860: (Length of Sequence = 294 Nucleotides)

CCACCCCTAA AAGCACCTGG CCCCGCTACA GCAAACCAGG TCTGTCCATG CGGCTGCTGG AATCAAAAAA AGGCCCTCTCC
 TTCTTTGCGT TTGAGCACAG TGAGGAGTAC CAGCAGGCTC AGCACAAGTT CCTGGTGGCC GTGGAGTCTA TGGAGCCGAA
 CAACATCGTG GTTCTGCTCC AGACGAGCCC TTACCAGTT GACTACTCC TGCAGCTCAG CGATGCCTGC CGCTTTCAAG
 AGGATCAGGA GATGGCTCGA GACCTCGTAG AGAGAGCGCT GTACAGCATG GAAT

SEQ ID NO:1861: (Length of Sequence = 183 Nucleotides)

TGAAGACTCC TAATCTAGTG CCTCGAGAAA AGCAGGCAAC AGAGGCCCTGA TGTCTGACAT TGAATCTTTG GAAGATTAAA
 CTTCCTCACA GATTTTATA ATNACTTTGG AAATNATGAC TGATGCCAG GCCTTCCCTT GGGTGGACAG TTTGTCTTTT
 TTTTTTTTTT TTTTTTTTTT TTT

SEQ ID NO:1862: (Length of Sequence = 296 Nucleotides)

TTGGGCTTCT TAAAGTCTCT CCCATCCCTC CTAAGGTCTA AGATGATGCA TTAAACACAG AGGATGCCCA ACAGTGGCTG
 ATGGAATTAC CAAGTAAAAT CTAAGAGGTA GAAAAATGTG GTAGTTTITA AATTTTATTT TATTAGTATG CAGGTGGGAT
 TCAGAGACGT AAGATCTTAG CCTTTATTTT CAACATCTCC CATGCATGTC AACAAAGATT ATCAAACACA GGAAGTGAAT
 AAAATACTAT GTAGACACTG ACCCTCTTTA TATAAAATGT GATTGATCAG GTCTGG

SEQ ID NO:1863: (Length of Sequence = 259 Nucleotides)

CAAAACAAAA AGGGGCTCAA ACCAACAGGA AGTCAGCCCC ACCGCAAGCC GGAATACAAC TAACTCGTGC TCTCCAGCT
 CAGGCGTGGG AGCCAAGGCT GTGCCAGGCC TGGCCAGGCC AAGCAGGATG ACAGCAAACG CATTCTGAAC GTTAGCAAT
 CAGGTCCCTT GTAATGTGCT TGGAGAGTNT GCACAAGGCC CGAGATGACG AGCTATGAGC TGTGGAAGGG AATGGGGGAA
 GCAGAAGGGC ACAAACAGA

SEQ ID NO:1864: (Length of Sequence = 290 Nucleotides)

ATCCTTACCA ACAATGCTTC CCAACTGCCT CAAAGCTCTC CTAAATGAGA ACATAGTTCT TTCTGAGCAA GGTCTGTGG
 ACCATGAAGA ATGTACCAA GCTCCCTCA GAGTCAGCG GAGCTCAGCC AAAGCACAAG TGCACTGCCC AGCTCTCCC
 ACTCTGCACC TGCTGCTCA NACTCCCTAC GCTGAGCCCA GGCCCTTACC CTCTGAAGGT GTTTCCCATG TGATCTGAC
 ACACACACCC CACAAGAACC AGATGATCTA TGNCATACAG CATTTAGCTA

SEQ ID NO:1865: (Length of Sequence = 236 Nucleotides)

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CTGAGGGGCA TTTTITATTA TAAATTAAAT ATGGTIGATT AATGAAAAAT GACAATGAAG TACCAAGAAA ATGTTTGTC
ATATAAAAAT TTTAGCAGCA TTTCCATAGT TTCAGGCTCC AACATTAGTC GTACTTCTC CTCCCGCTA TCAAAAAAG
AAGAGACTCC AATGGGATGG AGTAGAGCCT GGGGGTGTCC AGCTTTGTGT GGGCTCAGA GAAATACTCC ATCCAGCATC
CAGGATTCTC CCTCCCTCTC ATCCCTGAAG TGCTAGAATG TCAAAGCACA GAAAAAGCCT CCTTTGTGCT GACATTGGAG
ACAAGGAT

SEQ ID NO:1852: (Length of Sequence = 174 Nucleotides)

GGGCAGGACG GCTCTNGGCC CTTCTGGCT GACTTCAACG GCTTCTCCCA CCTGGAGCTG AGAGGCCCTGC ACACCTTTGC
ACGGGACCTG GGGGAGAAGA TGGNGCTGGA GGTTCGTGTT CCTGGCACGA GGGCCGAGCG GCTTCTGCT CTTACNAACG
GAGCAGTAAG GACG

SEQ ID NO:1853: (Length of Sequence = 252 Nucleotides)

GAGCCATGCA CACACACGGC CGCATAGTCA CACACGCATA TCTACATGTC CCCCCACAT ATACACACAC ACATATACAT
GGACCCATGC ACACACACAG CTGGATATTC ACACACACTT GCACATCCAC TCCATATACA TAGACACGCA CAGACACAGC
TGCATGTTCA CACACGNGGA CGTGACACG GACACAGACA TGCATGCATA TGCGCACAGG TGTGTACAGC CTCAGTGGTG
GGGTTGGCT GT

SEQ ID NO:1854: (Length of Sequence = 288 Nucleotides)

GGAAGGAGGG CTAAACAATG GTCTGCAGCT CAGTTACTCC TCATCTCGC CTGGGCCGGG CCAGCATCCA CTCCCCTTCC
TGTAAGCAT TTGGATTTCC TTGGGAAAC AGCCCTGCCC TCTGTCTGA TCCATGTGTT TTGAGATCTC ACAGTAGCAA
GTGACTCATG TTGGTTCACT GATTCCAGA GGCTGATTCA AGGATGTCCC CAGCTAGACC CAGGATGGTG GACTCCAGAT
TGGGCACTG GGCAGTTTCA CATCTCAAG GCTTGCCAT CATCGGG

SEQ ID NO:1855: (Length of Sequence = 293 Nucleotides)

AAAACTCTG TTGATATTTT AGTTATTAAT TCATATTAAC TTTGGCTGAA ACTTTTAAAT TCTATTGTA ATAGTCAAGT
AAAATTTAGA TTGTACATTT CTGGGTAGT ATTAGATTGT TTTTAAGATT GTTTTAAACA AGATGTTTTT AAGATGAGTT
TTAAATAGTT CTCITTAACAC AAATAAAGCT TAATATGAGT ATTTGAAGGA AATTATCCCA AACCATTCCA GTTCTGGCT
GTGAAGGCT TTTCCAGGGC TAATAAGTTT TCCACTTCAG CCGTAAGTAG GTG

SEQ ID NO:1856: (Length of Sequence = 308 Nucleotides)

ATCTTAGCAG AATCTTGAAA AGCCAGAGA TCCAAAGAGC CCTTCGAGCA CCACGCAAGA AGATCCATCG CAGAGTCCTA
AAGAAGAACC CACTGAAAAA CTTGAGAATC ATGTTGAAGC TAAACCCATA TGCAAAGACC ATGCGCCGGA ACACCATCT
TCGCCAGGCC AGGAATCACA AGCTCCGGT GGATAAGGCA GCTNCTGAG CAGCGGSCAC TTACAAGCCA AATCAGATGA
GAAGCGGCG GTTCAGGCA AGAAGCCTGT GGTAGGTAAG AAAGGAAAGA AGGCTGCTGT TGGTGTTA

SEQ ID NO:1857: (Length of Sequence = 299 Nucleotides)

GGGGAAGCT AATTGCAAT AATCCTTGG GGAAGGTCAG ACTCTCTCT TACAGATCTA GGAAGGCCCT GGTAAATGA
TGGCTCTTTG GAAAATGCCA AGCTCCTTCA GATTCCATAC CCTCTCGGC CCTCAAGCAT AGGCAACGAA CTTGTCTCTG
GCTTCAGNT TTCTCATTGA ATCAAAGCTC TCATGCATGG CCTGGATTG TAAACACATG CTGGCTGCCA GCAGTGGCAA
GTTAGCCTCC TGACCCACTT CTCTCTGCT TCACTCTGG TGTATGAAGG GGGATGAGG

SEQ ID NO:1858: (Length of Sequence = 295 Nucleotides)

SEQ ID NO:1845: (Length of Sequence = 441 Nucleotides)

GGGGAGGGGC GCACACACGA AGGGAGGTGT CAGCCGGGAC CGGAAATCCA ACACGGCRAA GGAAAAA CACRAOCCGT
TTCCCAAAGG GAGGAGCAGC AGGAGACGAT GAAGAGAAGG AACAGAACTC TCTGGGCAAT TCTGATGTAC ACCCAGGTAC
AGTGGGGATC TCTTCACTTG ATGCCCAAA AAAGGGATAA ACAAACAAA AACGTGAGCA GCCAGCTTCA TTCTCTTCTC
TGCTTTGTCT CTGCGCAGTG ACTTTGGGTT TTGTGTGAA GCTCTCTTAA TTCCTTGACC TTGAAGTTCC TCAACATCTA
TCCAGTAGC CTCAGTTTCC ACTTTGCTTC AACTAACATC TTGGACTTTT TTCAGTCTTG AACAGGCTA AACCTTTGAG
ATCTTGAAC CCGACTTCAG CCTACTTAGC TTGATACTAC C

SEQ ID NO:1846: (Length of Sequence = 255 Nucleotides)

ATGAATTCAT TGTTGATTTA TTATTCACAG TTAATCACTA CCTACCAAT GCTATCCGCA GAGTTAAAGG ATTAAGTACA
TAGGTCTTTA TTAAACACT GATTTTMTT TTAAATATA TACACACAAA ACTTAGTTCA GCAAGGCTTC ATGATATACA
CCAATTCCAA AATAAAACAA TCAATGGTC CNGGNGTAGA ATGCCAGATT CCTTTTATCA TCTGCGAGGA AAAGAGAAGC
AGGATGAGGA AGAGT

SEQ ID NO:1847: (Length of Sequence = 311 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTTGATTAG AAACCCAC ATCACTCG CAACATTCCT CCCACATCCA CATCCACGAC
GGAGCCAAAT CTCATTGTIN ACCCTCAGTC ACCACCCC CATGGAGC CNGTGGTTAC GNCATGGATG ACAGGTGTCA
TGACAGGGA GAGAAATTNT CCCCGGATAC CCTGAGG AGGNCAC CCCAGGCTA GGGTGGGAGG ATTTAGAGCA
GTGCAAGAAA CCAAGGAGGA TGGAGCATCC AAAGGAAGC AGGCAGGC TNGGGGATTG AGGGCAGGAA GGGCT

SEQ ID NO:1848: (Length of Sequence = 311 Nucleotides)

CCACTGGCCT ACATTATAGA AGTCTGTAT GCGGACCTG CCATTGTAT CATGGACGCA GGCCATGACC ATCATCACCA
CCCATTTTNT TGCTGAAGA GAATCCAAC GCTACCCAAC CATCTGTGTC TGCACTCAGC TCAAATTCTA CATCAGCCCC
TATCATCCGG TAGCTGAGGA AATAGTCACA GGCTCTGCA TTACAGCCTG GTTTGCCATA TCTAAAGCAT CCCTTAGTTT
TTCCACAGTC GTCCACTTG ATTTTGSCAA ATGNTCCAC AGGAGAAGCA GCAGGGCTNN GTGTGGGTG T

SEQ ID NO:1849: (Length of Sequence = 318 Nucleotides)

GTGAGTCCCC CAAGAGGGGC CTCAGTCAG AATGTGATG ACCAGTGGGC ACAGGTGGAG TGAGTGCTTG ATGCCCATGG
TGAAAGCAGG GATGTGGGGC TTGTGCACAG TGANCTGCTG GACCTCGTGG GAGCCGGGGC CAGGCCGTGG CGTGAGGTCC
AGAGGGTAGG CGAAGGCTTG GCCATGCTGT AAGTAGGGCT GCGGTTCTNA TAGATGGATG GCTCAGGTGG GCGGTAGGTG
GTAGGTCCAG GGCCTCCTGC CACATCCTCC TTGTAGANCC AGTTCTTGTG CCTGGAGGCC AGACTNTAGC AGGGAGCA

SEQ ID NO:1850: (Length of Sequence = 406 Nucleotides)

GGAAGCCACT GATTTTCCTT CAGTATGAT GATTTACTTT AAAAATGAAC CCAGAGGGAC GGGCATGGTG GCTTATGCTT
CTAATCCAG CACTTCAGGA GGCTGAGGCA GGCAGATCAC CTGAGGTGAG GAGTTCGAGA CCAGCCTGGC CAATATGGTG
AAACGCTGT NCTACTGAA AATATAAAAA TTAGCCGGGT GTGGTGGTGT GCACCTGTAG TCCAGCTAC TCAGGAGGCT
GAGGCAAGAG ACTCACTNAA CCTCTGTTGT GGAGGTGCGA ATGAGCCGAG ATTNCACCAC TGACTNCAGC TTGGGCAACA
GAGCAAAGAC TNGTCTTCA AAAAAAATA ANAAGGGAAA AAAAACCNG NAAAAGCTTT TTTATGTTA AAAACAAGTG
GGTCAC

SEQ ID NO:1851: (Length of Sequence = 328 Nucleotides)

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GATGGAAACA AGTCCTGCTA TTTTCACAAT CCCTAAGNGT TCTCCAGGCC TCTGGAGAAC AAAGTAAAGT TGTAAGATCC
 CCAAGACAC GGAAATCCT GGACGAACAG ATTAGAAATA ACTACAAAAA ACAAGTTTTT TACTTTTGAA AAGGGTACTG
 CACTGAAACC AAGTTGGACT TTTGGTCCAC CCCCAGGGCC CTCTTCAGG

SEQ ID NO:1839: (Length of Sequence = 359 Nucleotides)

CNNGTAGGGA AGAGGACTTT ATTGGGATGT TAGTAGGGAA ACATGAGAGG GTGAATTCCA GGAATAGAC ACTAGGACCA
 AGGTGGCGGT CACCTTAAAG AGCCATAAAT AAACITAAAA AATTAAAGGTG AGGAGGTGCC ACGTGGGGAG GCTGCTGGGA
 CTATCTGGGA ATTCCTAGGG ATGGAATTTT GGAATTGGAA AGGGGAAATA AGAATTTCCA GCCGTNTCAC AAAAGGGTGT
 GAAATGATCA CTTCAAGACT CCTGCTGCC CTAGGCTGGG AGTTGGGGTT CTGGGGCTCC AGGAAGAGGG GAGGTCTGGG
 CTCGGCTTNA AGGGGTGAAG AGGGCCCGGT CAAGGTCGT

SEQ ID NO:1840: (Length of Sequence = 360 Nucleotides)

CCAATGAGCC CAGCCTGACA CATATGGACT GCTCGACAGG TCCACTGTCC CACGAGCAGA AGCTGTCACA AAGCTTGGAA
 ATTGCCPTGG CATCCACCCT TGGCTCTATG CCTCCTTCA CGGCACGGCT GACCAGGGGA CAGCTCCAGC ACCTTGGCAC
 AAGAGGGAGC AACACTTCCT GGAGGCCCTG CACCGGCTCG GAGCAGCCTG GGAGCATCCT GGGCCCCGAA TGTCCTCCT
 GCAAAANAGT ATTTTNTCCC TACTTCAAAA AGGAGCCGGT GTACCAGCTG CCCTGCGGCC ACCTCCTGTG CCGNCCCTGC
 CTGGGTNAGA AGCAACGGTC CCTGCCCATG ACGTGCACAG

SEQ ID NO:1841: (Length of Sequence = 332 Nucleotides)

GTGTGATTCC ATTTATATGA AATGTCCAGA ACAGGGAAAA CCTATTINAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT
 GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TGATTGCTTC ACGGGGTGAT GACAGAATGT TCCAGAACGT GACAGAGGTG
 GTGCCATACAC AACTTTCTGG ATGTACTAAA TGCCGCTGAT TGTTCACTTT CAAGTGATIG ATTTTITAGGT TATTTGAATT
 TCATCTCAAT TAAAAAACCC AAACACGCAA ACTGCTCCCG CCAGCTTCAG CCCCAGAGCA GACGGCGCAN CGTGGGAGG
 GATGCTGAGC CA

SEQ ID NO:1842: (Length of Sequence = 246 Nucleotides)

GCTGGTCAAG GCAGAGTTTA CTGAACININ AGTTTCCTCC TGCACACACC GGGCATGACA CCTTCAAGTC TGNCCAGCAG
 TGGGTCCAGA AAGTACCCTG TGTGCCCTGG ACGCAGAGGC TACAGTTCTN ACTGTGTGGC ATGGGAGCCT TCANAGTGCC
 CTCGGGAGCT GCCCCTGGTC TTTGTCTGNA AAGGTGACTG GGAGGNTAGA AAAAGCAGCG GGCTGGCATT GTTTCGGGGG
 TGGGT

SEQ ID NO:1843: (Length of Sequence = 313 Nucleotides)

ATTTATITGA AACAAAATTG AGGTAAAAGA AGCTGACCCA GAACCCACGC CGTCCAGGC TGGGGAAGTC TCTACTCGCC
 CCACACCAGG CCCCAGCAC CGCGGGCCCG AAGCAGCCCC CAGAGGACAG ACGGGCCCTG CGCACTGAGG TAGCTGCATC
 TTAAGCCCCC ATGAGTACAA CTGCCAGGG CTGCCAATT CCCAGAGGGG AGGAGGAGAG AGAGGCAGGC AGGGGGAGCC
 CCGGCTTCAG GTGGGGCACA CCCCANACCC TCAACAAACC TTCCAGCCTC TTCGGGCTGG GGCACCTCCT GCC

SEQ ID NO:1844: (Length of Sequence = 274 Nucleotides)

CTTCGCTTCT NAAAACCAA CTCCAGCCGC TGCCAGTCGG GACTTGGTGC CCGNCGCTG CCAGAATGCT CCACTGCCAG
 CCGCCCCCCC TGCTCGGTT TCCCTTCTGT TTAGTGGCGA CACAGGCACC CAGCTTTGGG GTGGTGCTGA CGCTCCAGG
 GGTGCCAGGA GCCACTGGGA CAGGGTGAGG CTCCAGAGC CTCTCGAGG TGCCAGCTC TCCAGGGAGC TTCTGNNCCA
 AGGNGTCTG AGGGATCTGC TCCTTAACCN CCCA

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SEQ ID NO:1832: (Length of Sequence = 337 Nucleotides)

GTATTTGGAG ATGGGACCTT TGGAAATGCT TTGATTAGGA AGAAGGAGCT TTCATGAACG GGATTAGTGC CCTTATAAAA
 GAGGACGCAG AGAGCTCTCT CACACCTTCC ACTGTCTGAG GNCACAGGGA GAAGGCCCTG TCTATGAACC AGGNAATGAT
 CCCCACCAG AACACCTTGA TCTTGGACIN CCCAGATGCT CCANATCINT GAGAAGCAAA TTTCTGTGCT TTATAAGCTA
 TCCAATGTAT GGAATTTTNG TACAGCAGCC CCAACAGACT AAGTATTTAA TAAAATAAAG ATGTAAGATC TCTGTTGAAA
 ATGCACAAAT AATATCT

SEQ ID NO:1833: (Length of Sequence = 244 Nucleotides)

TCTCTCATTTG TAAGCACAAA TTGTTCCGTG TCTGGTTATT AAAATCGCTT TGGGTCTATA ACAGCCACTC TTGTCCCCC
 TTTTAATAGA AAATTTGTCAT TCTAGCCTGG ATTTCTCCCC ACTGGAGGTG GAGGGTGGGA AGAGAAGGGA GTCAGCTCTG
 ACAGCTTACA AACTGGGAAG TTCTGTGCAT CTCCAGGGAT TCCAGAGTGT AAGATCTGGT TGTGGAAGC TGGGCGCCCA
 GTGC

SEQ ID NO:1834: (Length of Sequence = 322 Nucleotides)

TCCTGTACTA CACCTTTGCC AACATGGCCA TGTGAACCA CCTGCGCAGG CCCCCGTCTT GCAGTACCTG TACTACCTGG
 CCCAGATCGG CATCGCCATG TCTCCGCTCA GCAACAACAG CCTCTTCTC AGCTATCACC GGAATCCGCT ACCGGAGTAC
 CTGTCCCGCG GCCTCATGGT CTCCCTGTCC ACTGATGATC CCTTGCAGTT CCCTTNACC AAGGAGCCCG TGATGGAGGA
 GTACAGCAIT GCCACCCAGG TGTGGAAGCT TCAGCTCTG CGATATGTGT GAGCTGGCCC GCAACAGNGT GTCATGAGC
 GG

SEQ ID NO:1835: (Length of Sequence = 178 Nucleotides)

ATGAAAGCAC AAAAGAAGTC TATCAAAATT ACAAAACTT AAAACCGAGT AAACAAACT TCAGAAAGAA TGAAAACAAT
 TGGAAAATAA CITCAAGAAA AAAATGTAAA ATGGAAACAA TACAAGANCA ATTTGTGCCC TCTGAAAAAC AGAGGTTAAA
 GTCAGAATTT TTTTGINC

SEQ ID NO:1836: (Length of Sequence = 377 Nucleotides)

CGCTTGGNAC CACACCCAGC TAATTTTTGT ACTGTTAGCA GAAACAGGGT TTCATCACGT TGGCCAGGCT GGTCTCGAAC
 TCCTGACCTC AAGTCACCCA CCTGCCTTGG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGTGC CCGGCCTTTA
 TGCTGAGTTT TAAGGGCTGT ATGAGACACC AGGTGGTGGG AGGGAGCTGT TTTGAGAGCA GGGAAATTTAG GATACTTAGG
 AAATTAGAAA ATTAGAGAAG TCATAGGATC TTGGAACATA GGGAGAACCT TAGAGTCCTG TGGAGCAGAA CCCAGCATTT
 GTATGTGGAG GAAACGGAGG GCCCAGAGAA GTTGTGACTT ATNCGGGGT CAATCTT

SEQ ID NO:1837: (Length of Sequence = 388 Nucleotides)

GGAGAGAACA AACCTCTTA CTGGCCTTGG GCCCATCCCT CTTTCTCCCA CACTGCTACT TTTGAGTTAT CTCATTTTGC
 TCCCAATAGT CAGCCTTGAC TTTCTTGGGCT TTACCTGGGC ATCAGGGACC CATGTTGCAC ATTCAAGTTGT CCGATTATG
 TCTGCCITAG AGCGTCTCCT AGGGCAGCCA GTCTGGAACA GTCAGTCACC TAGGGTCTG GAGCTCCTGC AGTCTGCCAC
 TCGCTNCITC TGCTGTATAA CAAATACTAT TCCTTTTATC CTTGCACTC GACCCAGAAA GAGGTGGCTG TCAATGTCCA
 AGGCCCTTGG GAAACGAAGG ACTGGAAATN TGAAACCACT GGGCACAGG GGAATGGGTG GTCTGAG

SEQ ID NO:1838: (Length of Sequence = 369 Nucleotides)

TCTCTTTATG CCAACAATTA ACTGGGAGCT AGGTAAATTT ATTTGGCTAG ATAAACTAC CAGCTAGATG GATTATTTG
 GTGCCCTCAT ACAGAATGCT GTAGAAAATG TAAAGAAGAG AAAGCTCCTT CCAGCTAGAA GCACATGGGA CTGCTTCTAG

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ATGAGAGGCA AATCTACCTT GAATGCACCT CCTCCTAGG CTGGGTGAGG TCACGCAGAC ACAGAAGGGC AGGACAGAAC
TCCCCATCTT CTGGGGGCCA ATTCGTCTGG AACTGTGCG GTCACTTCC TTTTAAAGT GCCAGTATCG GTGGGGCAGG
AAGGGACTCT CAGGGCTGAG CAGAGCCTTC TTCAGCG

SEQ ID NO:1826: (Length of Sequence = 207 Nucleotides)

COGGCCCTT CAGTCCCCAG CCCCTGCCCC AACTCCGACT CCTGCACCCA GCCCGGCTTC AGCCCCGATT CCGACTCCCA
CCCCGGCACC AGCCCCCTGCC CCAGCTGCAG CCCAGCCGG CAGCACAGGG ACTGGGGGGC COGGGGTAGG AAGTGGGGGG
GCCGGGAGCG GGGGGGATCC GGCTCGACCT GGCCTTAGCC AGCAGCA

SEQ ID NO:1827: (Length of Sequence = 309 Nucleotides)

GTGTGCGCT GTAGTCCAG CTACTCCGCA GGCTGAGACA GGAGAATCGC TTGAACCCCTG GAGGCGGAGG TTGCATTGAA
CCGAGATCGC ACCACTGTAC TCCAGCCTGG GTGACAGAGC GAGACTCCAT CTATAAAATA AAATAAAATA AAATAAAATA
AAATAAAATA AATAAAATA AATAAAATA AATAAAATA AATAAAATA TAAATAAAA TAAATAAAA TAAATATAA
AATAAAATA AATAAANTA GAACCACCAT ATGANCCAGC AATCTCATTA GTGAGTATAT ATCCGAGGG

SEQ ID NO:1828: (Length of Sequence = 382 Nucleotides)

ATCTCTGACC ACCCCCTCCT CCCCATCCCA CCCTTGGTA ACTCCCCCGC CCAGGNCATC GCCCAGATAT ATTCTTCTCC
TTGGGCAAGA AGTTCTGTGC ATGCAGGTCA AATCTGAAAG GGNCATTTCT TTCTTTAATG AGTGTGAGGG ATGGGGGATG
TGGCTGATGA TATAAGGGGC CCTCCAATCA GACTTTCTAA TCTAATGAA AAGNTAATTA CAATGTTGAT GCTAAAAAAG
AAGGTTCTGG CAAAATAGAA CTTCTGAAGC ATCATAAATC AGATGACTAA TATTGTGAT CCCCNITTA ATTTTCATGT
GAAGAAGAAT AGGGGATGTA ACTGAAGRAA TGNACTAAAA GTTCTTCTAT GTATTGATAA CC

SEQ ID NO:1829: (Length of Sequence = 361 Nucleotides)

GGCGCGCGCT CTGGAGCTGG ATGTCCAGGC TGCGGGCGCT GCTGGGCCTC GGGCTGCTGG TTGCGGGCTC GCGCTGCCG
CGGATCAAAA GCCAGACCAT CGCCTGTTC TNGGACCCA CCTGGTGGGG ACCNCAGCG CTGAACTCGG GTGGCGCTG
GGAATCAAAG GTCATGGCGA GCACGGTGGT GAAGTACCTN AGCCAGGAGG AGGCCCAGGC CGTGGACCAG GAGCTATTTA
ACGAATACCA GTTCAGCGTG GACCAACTTA TGGAACTKGC CGGGCTGAGC TTGCTACAG CCATCGCCAA GGATATCCC
CCCACGTCCA TGTCCAGGAG CCCCCCTACT GTCTGGTCA T

SEQ ID NO:1830: (Length of Sequence = 180 Nucleotides)

AAGAACGTTG GCTGCCTGCA GGAGGCGCTG CAGCTGGCCA CTTCCTTCGN CCANCTGCEN CTGGGGGATG TAAAGAACTG
AGTGGGGAAG GAGGAGGCTC CCACTGGATC CATCCGTCCA GCCAAGAGCT CTCATCTGC TACAAGAACA TTTGAATCTT
GGGACCTTTA AAGAGCCCCCT

SEQ ID NO:1831: (Length of Sequence = 335 Nucleotides)

AGATCTTCTA TATTCGACT ACTGATTCAA ATGCTAATCC TGGACGGGCA TGGTGGCTCA CACCTGTAAT CCCAGCACTT
TGGGAGGCTG AGGCTGGTGG NTCGCCGAG GTCCGGAGTT TGAGATCAGC CTGGCCAACA TGGTGAAACC CTGTCTCTAC
TAAAAATACA AAAATTTGCT GGGCGTGGTG ACATGCGCCT GTAATCCAG CTACTCGGGA GGCTGAGGCA GGACAATCAC
TTGAACCCGG GAGGCAGAGG TTGAGTGAG TTATTGCACC ATTACACTCC AGCCTGGGTG ACAAGAGCGN AATTCCATCC
CCCCACCAA AAGCG

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SEQ ID NO:1819: (Length of Sequence = 328 Nucleotides)

CCACTCCTGT AACCTGCTGG ATGACTCTGC ACTGCCCTTC TTCATCCTCA CCAGTGTCTT GGGTATCCTA GCTAGCAGCA
 CTGTCTCTTT CATGCTTTTIN AGACCTCTCT TCOGCTGGCA GCTCTGCCCT GGCTGGCCTG TCCTGGCACA GCTGGCTGTG
 GGCAGTGGCC TCTTCAGCAT TGTGGTGGCC GTTTTGGCCC CAGGGCTAGG TAGCACTGCG AGCTCTGCCC TGTGTAGCCT
 GGGCTACTGT GTCTGGTATG GCTCAGCCTT TGNCCAGGCT TTGCTGCTAA GGGTGCCATG CCTCCCTGGG NCACAGACTG
 GGTGCAGG

SEQ ID NO:1820: (Length of Sequence = 359 Nucleotides)

CCACCATGCT CTGCACTGCG NCTGGTACCA GGCCCGGAC CTCATGCTCA TGAGCCACTT GCAGGACAAC ATTCAGCATG
 CAGACCCGCC AGTGCAGATC CTTTACAACC GCACCATGGT GCAGCTGGGC ATCTGTGCTT TCCGCCAAGG CCTGACCAAG
 GACGCACACA ACGCCCTGCT GGACATCCAG TOGAGTGGCC GAGCCAAGGA GCTTTTNGGC CAGGGCCTGC TGCTGCGCAG
 CTTCAGGAG CGCAACCAGG AGCAGGAGAA GGTGGAGCGG CGCGTCAAG TCCCTTTCCA ACTGCACATC AACCTNGAGC
 TGCTTGGAGT TTGTTTTANC TGGTGTCTGC CATGTTCTT

SEQ ID NO:1821: (Length of Sequence = 208 Nucleotides)

CCTGGGTCTG TGACCCAGAG TTCCAACACA AAGACACTTT GTACTGGAAC GCTGGAGCCA TTCCAACATG AACAGCAAGA
 ATAGAACCTG TGCTGGCTGG TCTAAGATCA AACCTCGNGA TGGTGGTTTG AAGTNCCTTCT TCAAAGAAAG CTTGAAAATG
 AAATCTCAGT TAGGCAAGNC AGATAAAAGC AGAGTTATTC TGGTGGCG

SEQ ID NO:1822: (Length of Sequence = 314 Nucleotides)

GGATGINTTG AGCCAGAGTT TAAGCCTGAC ACACAGGCTT TGTCTCTCAC TGAGCTGTCT CCAAGACTGG AACTACTTAG
 TGACTCGGCA AATTTTCTGC CCCCCACCCC TCATCAAAGC TGCTAGTTCA GATGTTGACA GTGTTTTCTAT GAATGTTGGA
 ATCTTACTAG TCCAGACTTA CTTAGGATGT TGTGGGGAA GGCAGTTGGG ATTTTCTGTG TCTTGCAATC ACAGAGGGAG
 GCCATTTTCA ATTCAAGAGC ATTGATTAG GGGATCGTGA GGCAGGGATG CTACTGCGKA TTTCTCTCTT CAGG

SEQ ID NO:1823: (Length of Sequence = 344 Nucleotides)

AACAATTTTG TCTTTACTAC ATCTTAAAGA ATTAGAACTT GGGTGGTGT AAGTGACTTA CTTCCAGGNN ATCATGCTCT
 ATTTCTACCA GCAGGTGATA CCCNAATGTC AACTATCTTA TTGTTAACCA TGAATGNTAT TCAGATCTAT TACTTTTCGT
 GAAAAGTGGG ACATGTTACT TCCAACCATG GCCTGTACCC GTGAGTGTGA TCANCTTTNT CCAAAACCAC ATGGGTGCGA
 GGAGCTAAGG GGTGGTACCC MAATGTTAGG GACAGTGTTA GGAAGGGCA AGGGAAAAGA AGTGACTNGA TGTCTTATGA
 GRAACCGTAA AATGGCTTAA AAAA

SEQ ID NO:1824: (Length of Sequence = 340 Nucleotides)

GTGAGTGGCA GGTATCATGA ACCACATTGT GGACCTGGAG TTGCTAGGAC CTTTTCTGCC ATTACACAGA AAAATCCTCC
 CTGAGAACAC AGCCATTNGA GGNACATGG CAGAGGAAGA TAAGACAATA AACAGAGNCA CATAATTATG GCCAGGTGG
 GGGCTNACGG CTGTAATCCC AAAACTTTNG GAGGCCGAGG TGGGCAGATC ACCTAAGGTC AGGAGTTGGA GGCCAMCCTG
 GGCAACATGG TGAAACCGT CTCTACTAAA AATACAAAAA TTAGCCSGGC GTGGTGGCAC GGGCCTGTAG TCCTAGCTAC
 TCAGAGGGTT AGGCAGGAGA

SEQ ID NO:1825: (Length of Sequence = 357 Nucleotides)

AATTTGGTTG TGGCCAAAT CTCACTCAA TCACCTGGC CCAGGGCCTG GCGTGGGAGG ATGTGGCAGG CTCTGTCTCC
 TTCTGGGGTT CCTGGTCTGG AGGAGTCTCC CCAACAGCGC CAAAGCTGGC TGTTTTCCGC CCAAAGCCCC AGAAGTTTGA

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AGAGACTGAT ACCACTGGAG TGGCTGGCTT TTAATTCCTT TGGGCCAGAC CTGCAGCCTT GCCTTAATCC TTAA

SEQ ID NO:1813: (Length of Sequence = 344 Nucleotides)

CATCAGCGAC AGGTCTCCCT CCCAGAACCC CATCAGGACA GGAGAAAAGG CAGCAAGAGA GGTGGGGTGG TCCTGGCAGG
TGGGCCACCA GTTCTCTGAA TGAAGAGTGA GTCCCGGGTC AGGAGTCCAC ATCAGGTGTG GGCTGCTTCC AATCTGTAGG
TTCTCTGGA GATTNTCACA ATCTGCCAGC TCTCTGGGAA TCACAGAACC ATCATGTCCC CTTAGGATGG CAGAAGATGT
GGCAGAGCCT CAATCTCCAA CACTGAAACA CTNAGAGAGC TTGATACGTT CCTTAGGCAG GGCAGAAACA TCACAGCACT
TCACGNTAGG AACCACGAAA GAGT

SEQ ID NO:1814: (Length of Sequence = 442 Nucleotides)

GACACAGCAG GCCCCTGCCC CTGAAGGAGA CTGCATTGGA ATTTTGGCCA GGTGGCCCTG ACACATAGGA ATGCCCACT
ACTGTGACTA CCTCTGAGA TAAAAGCTG TCCTACTGAT TTTAGAAGGC CAAAATTAGA GGTCAATTTG GAGGTCATGC
CAGTGGACAT ATAACAGTTT GAAATGCTTG TTCCCGGGT CCGTAAAGAA ATAGTACTTG AACTTAAATT TATTCAGCAA
GGCATTTTTT ATTTCTGCA GAAAGGTAC ACTTGGCAGC AGTTTNCCTA CGAGAGTACC CCGAACAAAG GAGACAGGGT
CAATTATAAC CTGACGCGTC CACCTTCTG CTGTGTCCGG TTTCATTGG CTGGAACAGG ACCTCACATT CTGTATTTGT
CCCATTGGC TAGCAACTTA GGACTTATTA AAAGAGGCAA AG

SEQ ID NO:1815: (Length of Sequence = 299 Nucleotides)

GCAGAGAATC CCTTGAACCT GGNAGGCGGA GGTTCNAGTG AGCCGAGATC ACGCCACTGG ACTCCAGCCT GGACAACAAG
AAGGAACTC CATCTCAAAA AAAATTGAAA AAAAATTCAN GANATACAGA ATGCAAAAG GGACCAAAA AGTACCAAAA
ATTTCAAAAT TTTGTTAAAC TGTACCAAT CTGGNTACGA AGCGTTATTT TTGCCACAG GGCACCTCCC TGGAAAGNCG
TTACAATAGC TNAGGCTTCC TCTTCAGATA GANTTAGAGT GGCAGTAGGA TAGGCTCTT

SEQ ID NO:1816: (Length of Sequence = 286 Nucleotides)

ACCCCGGGTC CCAGGTATGC TCCCACCTCC ACCTGCCCA CTCACCACCT CTGCTAGTTC CAGACACCTC CACGCCCACC
TGGTCTCTC CCATCGCCCA CAAAAGGGGG GGCACGAGGG ACGAGCTTAG CTGAGCTGGG AGGAGCAGGG TGAGGGTGGG
CGACCCAGGA TTCCCCCTCC CCTTCCCAA TAAAGATGAG GGTACTAAAG TTGTCTGGT TTTTATTTTA TTATTATTTT
TTTCTTTTTC CAGTATACTA GCTTGTCTTT TAAGAAAGGG GATATT

SEQ ID NO:1817: (Length of Sequence = 320 Nucleotides)

GAAAGGAAGG CCAGGGTGGG AGGAAGGATC AGCTAAATCT GAGGGAAGAA GAAGGAAGG AGAGGGACTA TTGCATAGCA
GATGCAAATG AAGGGACTGT CTTATTATAC AGTTTATCA TCTGTTAATA CTCATAATCT TGTTCTTTT TCAACTTTTA
TATAATTTTA TCITTACATT AGTTAAATCA AAAATCTTAA AACACATTTT AAACGTGGTC ATAGGTTACT TTTATATATT
ATTGAATTTA TAATAAACAT GTTCTTTTNC TGGAAACTGG GATGGNACCN CGATGGTGT TCTTGAATAT AAGAGTGTCC

SEQ ID NO:1818: (Length of Sequence = 356 Nucleotides)

CCCAGGAGGC TGAGGCAGGA GAATCGCCTG AACCCGGGAG GCAGAGGTTG CAGTGAGCCG GGATTGTGCC ACTGCACTCC
AGCCTGGTGA CAGAGCGAGA GTTCATCCAG ACACACACAT ATATATATAA TTNCCAAACA GGCTTTACTA AACCCCTGA
GGTCTCATGA CACAGTAGAA AATCATGATT TAGTAGAAAG AGCATGGTCG TAGGAATCCA GTAGATCAGT AGACCTGAGT
TAGAGTCCCA AATCTGCCAC TTTCAATCTG TATGGCTCA GGCAAGTTAC TTAANCCTTC TGTCTCTCTG TTTTCTTTAT
AAAATGGGGG ATAATAATAG TAACCTCTTC ATAGGG

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GTCTTCAGCT TCACTCTGGC ACCACTGTGA GCACCGGGAA ACCTACCAGA AGTTGCTGGA GGACATCGCT GTCTGCACC
 GCCTGGCTGC CCGCCTCTCC AGCCGAGCTG AGGTGGTAGG CGCCGTCCGC CAGGAAAAGC GCATGTCGAA AGCAACGGAA
 GTGATGATGC AGTATGTGGA GAATCTAAAG AGGACGTATG AGAAGGACCA TGGGAGTCA TGGAGTTTAA AAAGCTTGCA
 AATCAGAAAT CAAGCCGAG CTGTGGCCCC TCTGATGGGG TCCCTCGCAC GGCACGGTCC ATGTCCCTCA CGCTGGGAAA
 GAATATGCCT CGCCGGAGGG TCAGCGTTC TGTTGGTTCCT AAGTTTAAATG CCCTGAATCT GCCTGGGCAA ACTNCCAGCT
 CATCATCCAT TCCTCCTTAC CAGCTT

SEQ ID NO:1808: (Length of Sequence = 431 Nucleotides)

GGTACTTTTC CATTTAGATT CAAATGGAGC TAAATTAAG AGTTTTATGA GCTGTTAAGA ATGAGGTAGT TTCTCTAGG
 ACCCCCCAAA GACAGTGCAG GTAATGACCG TTGGGNTCTC ATTCGTCGAT CTTTGATAGT ATGINTGGA GTCTACTCCC
 CAGGAGCCAG GACAGGCGTG AAGATGGAGT CCTGTGCGCA GCTGGAGCCT TGCCTAGCTG GTGATCACAC AGCCTGNCCT
 GTACCTGCAC CCCACTGGAT GGTGGTACAT GGTGGCAGGG ACAGGACCAC ACCAGTTAA GGCCAGACCA GGCTGAGTGT
 GACCCCTGAG GTAAACACTT CACTAAGCTG TGTCTGTTC ATGCCCCCTG CTCAGTGAAA GGTGAGTCCC GAGACCAGTT
 GGGTACCTCT CTTATGCGAA CCAGAGACAT T

SEQ ID NO:1809: (Length of Sequence = 401 Nucleotides)

CGTGAGGCCT TGAGCACAAG TGCAAGCGGG ACATCCTGCT CGGCCGGCTC CGGAGCTCGG AGGACCAGAC CTGGAAGCGG
 ATCCGGCCCC GGGCCACTAA GACCAGCTTC GTGGGCTCCT ACTACCTGTG CAAAGGAGGA GATCGACGTG TGGACCGAGG
 AGCGGAAGGG CACCCTCAAC CGCGACCTGC TCTTCGACCC GCTGGGGGGT GTTAAGCGCG GCAGCTCACC ATCGCCAAGC
 TCCTGAAGGA GCACCAGGGC ATCTTCACCT TCCTCTGCGA GATCTGCTTT GACAGTAAAC CCCGGATCAT CAGCAAAGGC
 ACCAAGGACT CTCGCTCTGT NTGCTTCAAC CTGGGCTGCC AAGAACAGCT TMTTACAACA ACAAGTGCCCT GGTGCACATC
 G

SEQ ID NO:1810: (Length of Sequence = 233 Nucleotides)

AAGTGCTATA TTCATTGTAT TATAGAGAAG GTTGGGGAGC ACAGAAGAGG ATCAACCCAG CTTTAGAAGG ATTAGAGAAA
 GCTTCCAGAG GGGTGGACAT TTGAGCTAGC AAGAAAGCAC AAGGGAAAAG GCATTTAGAC AGAGGAGACA ATTTGTCTTG
 ACCCAGAAGC ATTTGGGTAT GCTATGCATG GATAGNCAA GAATTTTTCG AAAAGGGGGG CCAGCAAGGC ATT

SEQ ID NO:1811: (Length of Sequence = 423 Nucleotides)

CAAAGAAAGA GTTGAACAT GTACATTGAA AAAAGGAAAG ACATTTTTC ATACCAACCT TTCCCTAGTT CGCAGTTTCT
 GAATAGTAGA AACAAAACAC ATTTTAAAT CTTTCTATCA ATTTAATTGA GGACGAAGTA ACACAACTTT TATAATTAAAC
 CACTGAAGTT GTCTTTAAGG ACAAACCTTA AATTTTAAAA TGGGTGTTAC CATATTINAT GAGTGGACTG ACTCCAAGGT
 TGCCITGCTC CAAGNNTGGG CATCGTGACA TTGCCGTGAT GCCCAGAAGA AAGTTAATGG CAATGATGTC CAGTCAGAGG
 GCAGACATGC TACACATCAC AATGATGAGA GCTGCGGGAT TCTGCCCTCT TCAACTTCCA AGTAGNAAAT TATTATTTTC
 CATCAAACT AACTGGGAGT GAG

SEQ ID NO:1812: (Length of Sequence = 394 Nucleotides)

GACCAGCCTG GCAACTTAGT GAGACTCTGT TTCAGGAAAA AAAAAAAAAA GTGTATTTGG CTGTTCTGAA GCAGGCCATC
 ATCACCTTC ACCTCACCA CAGGTGGCTC TCGGGGGCTG GTCCATGGC GGCTGTGGCG TNAGGATGGA GTCTAGCTG
 TGACCTGTGC CCAGGAGGGC GTGATCCGAG TGAAGCCCCA GGTCTCAGAG AGCAAGCTGT AGCCAGAGGT ACCAGCTTCG
 CCTGGGGCTT CAAGAACCTC CCATCTATCC CCATTCTGA GACAGGAGTT ACAGTCCCTT TTGGNCCINA CATCCAATAA

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SEQ ID NO:1801: (Length of Sequence = 166 Nucleotides)

CAAAANTTAC TCTGCAAAAT TAATATATGA TTTACCTGCT GTTNTCATAA GATTTCCAAA TAGACAAACT CGGTATGCTT
 NGGATTTGCT TTACATTCTA AGTGGATTG GAGGTCAGG CAGGCGCCAA GGAGINAGCC GAAGTTTCAT CANGCGGAGA
 TGTGG

SEQ ID NO:1802: (Length of Sequence = 281 Nucleotides)

GGTGGATGTC TTTGGGCGCA GGATGGAGCC CAGACCCAGT GGTACAGTG TGGAGCTCTC TCCCTGTCCC CTGACTCTGG
 CCAAGGAAGT GAATGCAAAG CAGCAGGGAG GAGGCAGGGT GGGGACGGCC CTCTGAGCTC TCCGCGATGG CTGGCGTGAG
 GTGCCCTCTAA GACTTCINGG CAGCCCTGCC TTCCTIACCT AGTCTTCCCG ATCTTNTGTC CACCTTTCTG TGTGGGCCAG
 NCTCCCGCCA GGTACTCAGA GGCCGCTCAG AGGGCAGGGT T

SEQ ID NO:1803: (Length of Sequence = 429 Nucleotides)

TTACAGTTA TAGTTGGGA CATTACAAC CCTTCTCAA TAATTGATAG ACTACTAAAT AAAAAACCAT GAAGGATATA
 CAAGAACTGT ACAACACTGG CCGGTGTGG TGNCITATGC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CCGGTGGNTC
 ACTGAGGTC AGGAGTTCGA GACCAGCCTA GCCAACATGG CGAAACCACA TCTCTACTAA AAATACAAAA AAATTAGGCT
 GGCTGTGGTT GCCTTAATGC CTGTAATCCC AGCACTTTGG GAGGCCAAGG TGGGCATATC ACCTGAGGTC AGGAGTTTGA
 GACCAGCCTG AAAACATGG TGGAAACCCA TCTCTACTAA AAATACAAAA ATTAGCTGGG TGTNGTGCCT CTGAAAAAAT
 TAGGTAAACT CCGTCTCAA AAATAATAA

SEQ ID NO:1804: (Length of Sequence = 278 Nucleotides)

GACCTGAAGC TCAAAGTCTC TCTCCTTACA CAACCAGCGN CAACAGGGCC AAGCTACTGG CTAAGAACAG ACAAACTTTC
 CTGCTTCAGA CCACAAAGCT GACCCGINTT GCCAGACGCA TGTGCAGGGN CTINTTACAG CCAAGGAGGG CCGCCCGACG
 GNCITATGCT CCTATCAATG CCAATGNCAT CAAAGCAGAG TGCTCCATTC GNCITCCTAA GGNCGNCAAG ACTCCATINA
 AGATTCACCC TCTGTGTGCG GCTGNCCCTG GGAACATAT

SEQ ID NO:1805: (Length of Sequence = 349 Nucleotides)

GCATCCATGG CGGAGGGCGG CAGCAGCAGG GCGGGGCTCC GCAGGTCGTA ATCTGAAGGA GTGGCTGAGG
 GAGCAATTTT NIGATCATCC GCTGGAGCAC TGTGAGGACA CGAGGCTCCA TGATGCAGCT TACGTGGGG ACCTCCAGAC
 CCTCAGGAGC CTATTGCAAG AGGAGAGCTA CCGGAGCCGC ATCAACGAGA AGTCTGTCTG GTGCTGTGGC TGGCTCCCT
 GCACACCGTT NCGAATCGCG GCCACTGCAG GCCATGGGAG CTGTNTGGAC TTCCTCATCC GGAAGGGGGC CGAGGTGGAT
 CTNGTGGAGC TAAAGGACA GACGGCCCT

SEQ ID NO:1806: (Length of Sequence = 403 Nucleotides)

GTGCACTGTG GCCAGATCTT TTCTAGTAAA ATGTGTGTTA CTGATGGGCA GACAGCTCTC ATTCAAGCAG TGACAGATGT
 AAGCNCITCC CATTTTTGTG GCCCATTTGT ATTACAGCGT TGGCTTCCAA GTTGCCCTGGG ATCATCTCCA CCCAGACTAA
 GGAAGAGGAA AGAGCTTGA CAACTGCACT TGGCTGTTTT TNATGGATCA GGCAAGGAAT TGGCTCCAAC ACATTAGCTC
 ACATTCATT GTTAGAACT GGGTTTCTCA ACTATTAGTA CAGGGTGAGT GTAGGGTTTT GGCACCATGG GCATTTGAGC
 TGGCCAAAGG CTAATCAGAG TTAGAACAAA GCCACAAAGC CTGTGAATGG TGTATTATTGT TGTGAGGAGC TGTCTTGTGC
 ATT

SEQ ID NO:1807: (Length of Sequence = 426 Nucleotides)

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GAAACGCTAA GGTTTTGACA GGGTTACAGT GAATTCTCCG GCTGTAGAGA TTGGAGGAAG TCGGGAGAAA TTCGTCTCTA
 AGTGTGAAGG TGGAACAGCA TTCAATTTCT TACTGCCAAT GGAGGTTTTT CATGAATTTA CTAACTCAGT AAAAAGATTC
 GGCCTTTTTT TTTTAATCTT AAAGGATCAC GCTTTAAACC TCTGTAACAA AGTAATTATT TGTACCACTC TCTACCCAC
 CCTCCAACAA AATAACCTAT CGGNTCTCAG AAAATAATAA CCCTTTGCCT GCCTTTGAAA TAGTTATCCT TTTTAGTATG
 ACAGTGTTC AAAATCTTT TCTTAGACTT GTAGCAGAAC ATAGCTATGA TGATCTGAAT TTTTCTCTT CAGCTTGTC
 TAAGACGAGG GGGACTCC

SEQ ID NO:1796: (Length of Sequence = 416 Nucleotides)

CTTTATTACA TATGCAACCT TGCCATGCCT GCCAGTTAAC TCCCCTCCCG CCAATGTTAT CCTCATGATA TCAGCTCCCT
 CTGGGGGCA CTGAGCTGCC CCCCCTTCCT TCTGGGCTGG AGTAGTGGTG CCGCTCAAGC AGGCAATGGG CAGGGGGAGA
 TCCACAATTA ATCGTGCAG TTCTCTTAAA AGTATTAAAC CTTAAATAAG CACTCTTGGG GAGTTGCAA GGATATTGAG
 GATGGGATGC AGTGGGAGGC TACCCCTCAT CCAAGGTACA GGCTGGAATG AGCTACAGCT GGGTCTATCG TGGGCTCAG
 AAGGTGAAGA GGGACCTAT TCTGGGCTT AGTGTGGTG GGCATATCC TCCCAAAT TGTCTGTGG GCGATGTTCT
 TCACATCTAG GAGAGC

SEQ ID NO:1797: (Length of Sequence = 298 Nucleotides)

AGGAGGGAAA CCAGATCAA ACTACTACTT CTAGATGAAC ACAGGCTCTT GAGAGTCCCC AAGAGAGGAG GCTGTGATC
 CAATCTGAC TCAGACTACC TACCTGGCTT CCTGGCCCTA GGAGGTAAAT ATGATAGTNT CAGGGGTCC ATGTAGCAAT
 CCAAGCAATT OCTGAGGTGA GAGCAAGCAA AGAGGATAGG ATGAAGGGAA GGCAGGCAA GAATGTGCTC CTAGTAAGAA
 GCAACTCTNT TCCACTCACT TCCTTTGCT CINTGGCAGG CAAGTCAACT GGGTCTC

SEQ ID NO:1798: (Length of Sequence = 245 Nucleotides)

CTGTCCATT TTACAACAN ATACATCCAA AACACTATAT AATANNTTTT TTTACAACAT TTCCAATGA GAAGATTGCT
 TTTNCCCCA CTACTGCTAT TCACACACAG TACTTCCAG GCACAATACA TTAGGAGATC TAAAANTGCT CACCTGTAC
 TCTAGGCTGC TTAGGAAATG TGAAACTAG NAACATTTAT AATGGCATT GCTCCTTTCA ATACAAGGCA ACATTTTAGN
 AACCT

SEQ ID NO:1799: (Length of Sequence = 312 Nucleotides)

GAAATGTTAG GCTAGTTAGA AGGACACGGC AATAGCCTTG AGATTYTCAA CCAGGGTAGT GTATTAGAWG TAAAAAGGAG
 AGGAAAGATT TGAGAGTTAT CTCAGAAACA GAACCATCTA ATTTTTTGG ACTGATTTGA CTGCTCTTC ACTCATTTTT
 TTATTCATC AACAACTATT TTTGAKTNT TTGGATGGGT CAGACATTGC GCTAAGTGAA AAATAGGAAG GTAAGAAAAA
 GAAGACTCTG AAGATGAATT CCTCCCCAA AACTGAGCTA CTAGCTATTA CTCAGTGGG CTGAAGTGAC AC

SEQ ID NO:1800: (Length of Sequence = 309 Nucleotides)

GGCATGTGAC ACTAGGCCAC AAGCGATAAG CACAGGCACC TGACTTTTAA GTTTTGTGTT TCCCAAAGTG
 CTGATAACAA TAACAACAAC AATAGGATTC CAACCAAGNG CCTCAAGTGA CAGCCAGGNA GAGACCTGAA GGTGGGGCC
 ACCCAATGC CAAATCGTTT CTAAAGGAAG CTGAAAAATG GGACTGTCTT TTGCCACTT CGTTGTGTTA AAAGGGGACA
 TTTGTNCAA CTNCCAACC GAGTCTAGA AGNTCTGAC AAGGAGGCAG CATCCAGCCT TGACCAGGC

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TTCAGTGCAG AAGTCAGTCC AGGTGGGTTC AGGCCCATGC CACCTTCTCT GGCTGCACA GTCCACCCC AGGCAAGGGG
TCTTTCCAG AAAGGCTAAA TGCTCTGTCC TAANCCTNGG AAGTGTCCCT TTCAACTAAA CCCCTGGCCT T

SEQ ID NO:1789: (Length of Sequence = 312 Nucleotides)

CAGGGTGAAG TGAGCCTGTG TGGGAAATGA GTCTAGTGTG AGGAGGCCTG GCTGCTATAA TGATATTTAT CTCACAGTTT
ATATTTCATT CATTATATTT ATTTTITTA AAGGTTTCTT TATCAGCTAC TAAACATCTC AGCAATTTGG TGTGCATAGC
TCTAGATTAA GCAACAAAGA ATTGTACTGA TAACAAACCA CAGGGGAAAT GGTGGTTAGT AAGAGTCAGC CTTATAAAAT
TTACATCCAC ACTGTTTCAC AGCAAGATTG CTCTCTCCAA AACGTAGCCA TCAAAAGCAG CAAACAAACC CT

SEQ ID NO:1790: (Length of Sequence = 281 Nucleotides)

TGTTTCCYTC ATTAGCTGTA GACTATCCCC TCTCTCCCA CCACAWTGT TCIWIGATGA KITACAAACA GAAAGGAAAT
CACATTTTCA TACTAAAAAC AAAATGWICA GAGCCTTGAT TTYTCCACTA GAWACTACAC GTACAGTTAA GAGTCCACAT
GCAACACCTT AAWTCACAGA CTGAGACCTC ACATTYTGAC CTGGAGNTTC CTCCCCITCC CCAGCCTTGG GCTAGCTTTG
GCCTAGGCTC ARGTAATACT GACACCACA GCGCTGCTC T

SEQ ID NO:1791: (Length of Sequence = 261 Nucleotides)

AGGCAAGCA GAAAGGTGTG TTGCCAGAC CAGCATGGGC AGCTCAGAGG GAGCAAAGCA TCCACCAGAA GAGGCTCTCC
ATTTTTTTGT AGGGCCTGAC AGTTGAGATT TGAGGCTGAG TTAACAWTGG GACCACTGAA CTTTPTTCCA ATGGAAYT
CACGGCCAG TCCACAGGA ACTTTGCGC ATACCAAACA ACATWAGGA AGGAAGGGCC GGTGGCTCT ACCAAACAKT
TCAGGTCCAC TGGGTGAWTG A

SEQ ID NO:1792: (Length of Sequence = 324 Nucleotides)

CTCCATCTTT ATGGGCTGTA TAAACATCTC TGGTCTGTAC ATACATTTCA TACATCGTAG GGTGGGAAGC GAGGGCCAAA
GGGAGGCCCA GCAGCACAAC AGCTCACCAG CTTTCCCTAC AGCCCTACCC GCTCTGTGCA AACCAAGGCC AACAGCTCCT
GCTGCCCTCT CTTCCCTGGA AAAGTCACTG TTATGGGGAG GGGGCCAGGG GTTGAAGGAT TAGAAGGAGA TAGAGGGCTT
GGTGGGGAGG CCACATNTAA GTCTAGATT CAAACACTGA AGCGAAACAG GCAACTGGCA CAAGCAGCAA GCTTAGGCAT
GGGC

SEQ ID NO:1793: (Length of Sequence = 386 Nucleotides)

ACTCTTGGGG ACCCAAAGAT GTCAGGTCCC CATACTCTGA GGAATCAGGA CACAGCCCAG TGCCTGACAC CACAGAGTGA
GGCAGCCCTT CGGGTGAGGG CCTGGGCTC GAGGGATGEC AGCCACCACT GCCTAGGCAA ACGCACCTGG GGCTGAACCT
GGCGCCCGGC ACTTTNAGGA CGCCAGCACC AGTGGGCACT CGGAAGTGCC AGTTCTGGCC CAAATTTGGT GACCTGGGTC
AGAAGGACCT TTCAGAAATGA NTGTTCCCG TCAGCAGATA CCGTCAAGAC ACGGCTGGCT CTGAGAGGGG CTGGGTGCC
GTTTGTGCTG TATCTCTCTG GGGGCCAGCA CGTCTCAGAG GGTGTCCCTG TGGGTCCCG GGTCA

SEQ ID NO:1794: (Length of Sequence = 308 Nucleotides)

GGATGCTCTT TAAACATGC AAATGGGGC GGGCAGATG GCTCATGCCT GTAATCCAG CACTTTGGGA GGCCGAAGTG
GGTGGGTAC CTGAGGTGAG GAGTTCAAGA CCAGCCTGEC CAGCATGGTG AAACCTCATC TCTGCTGAAA ATACAAAAT
TGGCCAGCG TGGTGGCATG TGCTGTAAAT TCAGCTACT CGGAGGTTG AGGCGGAGA GTTGTGTA CCGGGAGGT
GGAGGTTGCA GTGAGCCGAG ATTGCACCAT TGCACTCCAG CTTGGGTGA CAGACGAGA CTCTGTCT

SEQ ID NO:1795: (Length of Sequence = 418 Nucleotides)

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AGAGCTTAGC ATGCTGTGG TTCATGTTTT TATGTGTTA TTTCACATG ACTTTTGCCG TGAGCTTTGA GGGAGACAAC
 ACCATCACAT ATGTGTAAAT TGTAAGAA TTGGGAGAGA ATAGCTTTGG GAGATCATTT TCTTACTGGC CATGATGAAG
 AAAGCTGTAT CGTAGGAAAA TTAGTAGGTA ATTTTACTCA CTGATAAAG TTAATTTGCA AGGTATCAIT CGATTGGTAG
 AGTTACCAA ATGAGAGTTA AAGAACAGA AATATGGTT CAGTTTATGG TGCATTCTTA TCTTTTTCAC TGAGTCTATT
 TCTGTCTGGT TGCTTCACCT AGTACTCCAA CCAGACAAGA GGAAGACAAC TATGCTAGTG TTTTAGGAAA TGGGACAGAA
 TGGGGTGATT TAAGTAGGAG CCNGGGT

SEQ ID NO:1784: (Length of Sequence = 428 Nucleotides)

ATGGGATACT AATGCAAGCA TTCAGTGAAG AAAGTAGATT ACCAACTAT ACGATCCTCA TTTATTTTAA AAAGTGATAT
 CCCCCAGAAA AAAATAAGAA AGATAAAGA TGTTGGTAAA ATAACATAAG AATAAAAATA TAGGGGAAAA GGTAGCCAAG
 GGATAGATAT TGATATTCAT TTTCTTTTAA CAACTTTATT AAGTTGTAAAT TTGTTGCAA CAGATTGCAT ATATTTGANG
 TATATACTT GACTAATTTT GACAAATATA TACACCCATG AAACATCCAG TTATAATTTT AAACATTTTC ATGGCCCTCC
 AAAGTTTCCT TGTTGCTTTT TGCAATACAC GCAACACAC ACACCCCA CACAGTATGT AGGGCAACCA TTGATCTGCC
 TTCGTTACA ATAGGTAGG TTGTCATC

SEQ ID NO:1785: (Length of Sequence = 414 Nucleotides)

GTAACAGAT TACATTTGAA CACCTAAATA AGTATTGTT TCATAATCAT TACATGCTTG TTTATGATT ACAAGATT
 GGTAGAGAAA AGTACAGTCC TTAAGGATA TATATGCCAA TGCATTAAAC TACTCAGCTT TTGTTGCCAG TCAGGTGTTT
 ATAGGAACAG GAATGTGGAA TACCAGCTTT TACTTTAAT TATACTTTTA TGCTGAATTT TTCTTCCAGT TAAACCTTTA
 ATTACACTAG TATGTAAAGT AGTTACTGAG AAAAATAAGT TTTTGATTTT CCTTCTGTG GATCTGTAAC ATTTTAAAT
 GGAGCTATTT AACACATGAC ATGCTAATGT TACTTAATGG GTCTCTGCAT TTTAATTTTA NGAAACACAA ACCTGGGTCA
 CAAAACATCT TCAG

SEQ ID NO:1786: (Length of Sequence = 397 Nucleotides)

GTTATTCCAA CCAAAATTTT CTAAGATGA AATGCAGAAA CTACAGAAT TGAGTAAAA GACAAAACG TAAATACTAA
 ATATTGAAAA GATGCAAGTN CTCGCCAAT AACTCATAG ATTTAATAAA ATTCAAATTT AAAGGCAATT AATTAGGGAT
 GAGGCAAGAA TCTGGGAAGA AAATTAATCT GAAGTTTGTG TGGAAAAATC AATGGGTGAA ACGAAAATAT TTTAGGATAA
 GATTAAATGAG AAGTAAAATT ATTTCAATTA TAAANGTAAA ATGATAAAAT AGTTAGACCT ATATGGTACT GATGCCAGGN
 ATGTTATACA AAGCTACGTC AAGGCTTGAG GATAATTTIN TTGAAGATAT TCGTGGGTAT CTCATTGGCT ATAAAG

SEQ ID NO:1787: (Length of Sequence = 408 Nucleotides)

TCCACAATT GACAATATAT ATGCATGTTT TTAACCAA TCCAGAAAGC TTAACAATA GAGCTGCATA ATAGTATTTA
 TTAAAGAATC ACAACTGTAA ACATGAGAAT AACTTAAGGN TTCTAGTTTA GTTTTTTGTA ATTGCAAAT ATATTTTINC
 TGCTGATATA TTAGAATAAT TTTTAAATGT CATCTTGAAA TAGAAATATG TATTTAAGC ACTCAAGCAA AGGTAAATGC
 ACACGTTTTA AATGTGTGTG TTGCTAATTT TTCCATAAG ANTTGTAAAC ATTGAAGTGA ACAAATTACC TATAATGGAT
 TTGGGTTAAT GACTTATGAG CAAAGCTGGT TTGGCCAGAC AGTATACCCA ANCTTTTATA TAATATCCAG ANGGCTATCA
 CACTTGTG

SEQ ID NO:1788: (Length of Sequence = 391 Nucleotides)

CAACTTGGA CAACTTTT TTTTGAATGC TGGTCTGATC AGTCCACGGC CAGGGGTAGG TGGTAACTAG AAACAGCTGG
 AAGGAGGGAA GGAGAGGGGA CCAGCAGTCC GCAAGCAGGA GGAAGGAAA GGGTTGGGGA CAGGAGGAGG CAAGGCTGAG
 GAAGGACCCA GCCAGCTGGG TGCTGCCCC GGCTAGAGAA CGAACCAACC CCACCCACCA GGCTACCTC CATCTGTGGC

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CCAATGTCCA CTCTCTTCTC AAAGAAGTTC ACCAGCACGG ACTCCGTCAG GATGGAGGCC AGGTTCTGCT CAAAGGAGAT
GCACCACTCG GTGTGACCG TGCCGCGGAT GCGCGCTGTG GGGCTGCAGG CCTNCCCGCC CACCAGCACC GTGTGCTCTG
CAAGGTCTTC ACATTGCAGG GAGCCCGTNC TGACCACCGA GTAGGAGGAC ATGGACATGT CGTCTTT

SEQ ID NO:1778: (Length of Sequence = 297 Nucleotides)

CCCCCAACT AGAAGAATAC AATTAAAAA AGAGGCAGTA CACATGGTTA ATAAACAGAT GAAAAATTA AAATTCATT
GTACTATAAG ACAGGCAGAT TAAATTATTT TTACCTATCA AATTAACCAG AACAAAGGCA TGCACTTTAG TGAGGATGAG
GAACATACAG ATTCACTGGT GAAAGTAAAT GTACACACAA CCTTCAAGT TGATAGTTTG GCAGAAGTTG CTAAAAACAT
TTAAAGCTTT CATACTTTTG ATAAGGCTTT TTATTTTGA AAACATATAA ATAAAAA

SEQ ID NO:1779: (Length of Sequence = 353 Nucleotides)

CAGAAGTAA AGATTTTWTAT TGTCTATAG ACACTTCGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTTCATCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAWT
GATCAGTAAA AACATGCAA AGTGAGAAG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGATGG AATTTTCAGAA
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CCAAGCTTNG
NGGAAAGCAA TGAGCTCCAC CCTATTCAGC AGA

SEQ ID NO:1780: (Length of Sequence = 428 Nucleotides)

CGGCTTCCCC GGAGCAGCCG ACAGGGCCAC AGGAGAATGG TATGCTGCTC GGCATGGAGT GAAGACCACC CCGTGTGCAA
TCTGTTCACC TGTGGGTTTG ACCGGCAAGC CATTTGGTTGG AACATCAACA TCCCTGCATT GCTACAAGAA AAATAAGGAC
ACCGGCAGCC CTAGTTTCA CTGTTTGCCA GCACAGACCT TTGATGGGTG CAGGCTTTTC TCGTATTAA TCAGCCATTT
TTGTGAGAGT TTGACCCCTG AAAGGGTGCT TTGTATATGT TCTTTTCACA TAGTGCCAG CTTGCATGAA ATGTACAGAG
AAATGTGTGG TCGTATTTT TACTTTTGTG TTGTATATGT ATGGATAATT NGGGTCCCTT GGGCAGTAGA GGCAAAGCTC
ACCTCCCATG TAGCATGA AAATGCTT

SEQ ID NO:1781: (Length of Sequence = 459 Nucleotides)

ACCTCAGATT GTGAAGGGCT CTGTAGGCTA TGTTAAGGAC ACTAGAAATC TATTGAAAGG TTTTAAGCAG AGAATTGACT
TGCTCATATT TTNCTTCAA AAAGCTCAAT AGCTACAAAA CGGTCAATAG ATGGTAGCTT TGTGGGGCTG GGGTGAATGC
AATGATATTG CAAAACAAGA TATAGGGAGA CAAGAACTTT TAATAACCTA AACCAGTGGT TCTCAAACIT TCCATGCATC
AGAATCACCT GGATGACTTG CGAAACACA AATAATCAGA CTTAATCCCT ACATTTCTG ATTTAGCAGG TATAGAATGA
GGTTTAAGAA TTCTAACAA GTTCCAGAT GCGTAAAGT GTCTCTCAGG GTTTTACTT GAGCAACTGG GTGGATCCNG
TGGATCTTAT GTCCCTNCGA GTAAGGGGTC AGGTACAGCA TTCTCCGGTC AGATTGTTT

SEQ ID NO:1781: (Length of Sequence = 420 Nucleotides)

GAAAGCACAG GAGCCTGCTT CCAAAGAGGG ACTGTCCGT AATTNAGAGA TGCTCCAAGG CTGACCATCC TCCTTCTCCT
GCTGCACACC CAGCAGCCAT CTATGGCTGG ATTTGGAGAA TTTCTGGTCA AACCGTGAG TATGAGGAGA GCAGGGCAGT
TGGGGAGAGA GGTCCAGCC CAATTCTGCC CAGAGAAGCT CCCAAAGAG AGGGAAGTGT CCTGATGAAG AGCCCATGAA
AGGGTGAGAA CCCAGGAGG TGTGGAGATT GCTGCGGCT CCTCTGGTCA GTAAGGAACC CTGACAAGAT CCCTAGGATG
GGGGTCCCTT AGTCTCACTG AAGTTCITGT AACTTNGGAT TGGGGCCAGG TCANCTCCT CTGATACCCG AGCTACAMAT
CTGGCTTCCC AMTCTAGAG

SEQ ID NO:1783: (Length of Sequence = 427 Nucleotides)

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CAGAAAAGGC AAAGTTTATT CCAGTGTGA CAGAGAGAGG GTGAGCCTTG CACAGCAATT CTAAAAACAT GTCATCTCCT
 TCACCTAAGA GGTAAGANCC GGCTGTAAGT CATGGGGTCA CTAAACCGGC CGCAGTTACA GTAAGCAGAA GAGGTCAOGG
 CTCAGGCCTT CTCAGACTTT CCTGGGACA CACGGCTCTC TGGGGGGGCC CGGCGAAACC ACTCGGACCA GGAGCCATCG
 TACACGGCCA CATCAGGCTT NCCGAGAGG TAGGCAGCCA AGGNCACGTG GCAGGGGGTG ACTCCCTTGC GGCACTGGC
 AATGAGAGGC TTCGAGAGAT CCACCTTCTT GGGCTTGAAC AGAGCACGGA GCT

SEQ ID NO:1772: (Length of Sequence = 281 Nucleotides)

AAAGTGTGG GACTATAGGC GTGAGCACTT GCATCCGGCC TAGGTGGGGT TTGTCCCCG TTCTGCAGGA GGGAGACTGA
 GGCTGGGAGG TTCAGGGCCT GCTGGGCTGT ACCCAGCCCC AGTATGTGCC TTGGCCACAC TAGTCAGATC CTTCCCTCC
 CACTCCTGCC ACCCTGCTCC TGCCCTGTCC CATAATCCAG GTTGAATGGG GGTGGGGATT TTNGGGAGCA AGGAGGGCTC
 AAAGAGATGG AGATAGGCT GTGTGAGGC CAAAAGTGCA A

SEQ ID NO:1773: (Length of Sequence = 401 Nucleotides)

CTCTCTGCCA TGCTAACCA CGTAGAAGAG AATAAGATAA AGCAATGAAA AGCAGAGTGG CACTCTGATA TATAAGATT
 TCTAAGAAAT ATAGAGTGAA TTTGCCCCA AGGCCCTCAC TGAAGTAATT CCTGAACCA AAGAGTATTT CTTAATCCAA
 AACTTTACAG TATTAGACCT ACGAATTCTG ATGATGCCTG ATCAGATGCT AGTTGTTCTC GACAATCCAT GCAGTTTCC
 AGTATGAAGG AAAGTAACAA ATATACCATG GTTATTTCTA TTTCTTTCTG AAAAATATCT AGGATATTTT ATAGTGTCT
 GTGGTAAAT ATTCATTGA CANICACAAT GAAGTATAAT CAGAAGTATT AGCAATTTTA CTTTGTATTAT CTTGTTAATC
 C

SEQ ID NO:1774: (Length of Sequence = 230 Nucleotides)

TCTGTAAAA AAAAGTAAAA ATGTTACACA TAGGNAATAA ATGTAAAAAG CTATACTTTG CCAAAATAAA GTTTCAGCTG
 AAGGTAATGC TAGTTATAAA TTAAATACAA TTCTATTAG NNCTTGCAAA AGTCAAAGGA AGACGNAAA CTCCCTCTTT
 TGGCAATTCA AAGGCAAGA CCGTTCATT TATTCTTAAT TTNCTTTAT ACAATCATT TCCCCACAG

SEQ ID NO:1775: (Length of Sequence = 359 Nucleotides)

ATTCAGGACA TAGGCATGGG CAAGGACTTC ATGACTAAAA CACCAAAAGC AATGGCAACA AAAGCGAAA TTGACAAATG
 GGATCTAATT CAACTAAGA GCTTCTGCAC ATTAAAGAA ATTACCATCA GAGTGAACAG GCAAACTACA GAAATCTAC
 CCATCTGACA AAGGGCTAAT ATCCAGAATG CTACCTAATT TTAAAGACT TTTCCGGCA TCTTGAAAAA AACCACCAT
 ATTTGACATA GGTAAACTG AAAAAACAA CTATTCTATA TTCAATTG TGACACATTA TGTAGTAGCT AGGTTCTCA
 CATAAATTAC ATGNTACCC AGTTCAAGTT AAATTCAG

SEQ ID NO:1776: (Length of Sequence = 375 Nucleotides)

GGCAGAGGCT GCAGTGAGTC CAGATGGTNC CACTNCACTC CAGCCTGAGT GACAAAGTGA CACTCCATCT CAAAACCCCA
 ACTCCCCCA AAATTTTAA TTGGTTTGC ATTTCTTTGA TTATGTTTGN GGTCGATTGA GACTTGAGGC TGGCACTGGA
 GCAGGCGTTC CCACCTGTCC CGTGAGGCAA AGGTCGTGGG GAGTGACCAA GTGCATCAGG GGGTGCAGAT GCCCTATTCT
 GGCTCTTTCA CGCTCAGCCA TCTTAGCATA NGTGAATATA CCATGAGCTG TTTCTCAGCT TGTTTTATTT TCTGGNGAG
 ATAGATGTCA CTGGAATGNN CTTTNTCCAA GTGAAAGGCC ATCTGTGCT ATGAC

SEQ ID NO:1777: (Length of Sequence = 387 Nucleotides)

GATAAGGGAG GAAAGGCAGG AGGAGATGAG GCCAGCCCCA CTGATGACAC CTTGGGCCAG GCCTCAGAC TGCAGGCATC
 AGCCGGAAAC TCCAGGCTGC TCATGGTCAC TGGCGGTGCT GAAGTGTCTC TCCACTTINT TTTGGTCTT GATCTGAGT

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GGAGGCCAAG GCTGCAGTGG GCTGTGATTG TNCCACTGCA CTCAGCCCA AGTGACAGAG CAAGACTCTA TCTCAAAAAT
CAAACAACAA CAACAACAAA ACACCACATA CACACACACA ATGAGGGTAA ACAAATAAG TATGTGTGGG TCACACTTCA
GCAGGGGTG CTGGTTTGCC AGAGGAAAGT GCAATTATTT TATCTATGGG TGTTTATTGT CTCCTACTTA AACTGTCAGT
TACAGATGGC AAGACTGTTT

SEQ ID NO:1766: (Length of Sequence = 373 Nucleotides)

GTAAATACT AAGACACTAA ATGGTATTT TAAATTTGCC CATTAAGTTT TGGCTGCGT AAGAAATTAG TAAAAATAT
TTCAAATAA CATGCAGAAG TTGTTTTTAA ACTTAAAATC TCATATTTTA GCTACACCCA CAGCGATGCT ATAGAGAGGA
GCTGGATTTC GTTGATCTG AATGGCTCAG ATTATGTTCC TTCAAAAAA GTTATTTTAT GTACGATCAT TTTTATATG
ANGCATATGA AAAATCACCC AGAATCTACC ACGTATTTAC CACATAGACA AATGTCCATC TTTAGATCTG TCATTCAACA
CCATGTTATT CTTTATATGC AACAGAATGC AGTGTGTGA GAAGTACATC AAG

SEQ ID NO:1767: (Length of Sequence = 330 Nucleotides)

GGTGACAGTG GCGGCANAGC AGCAGCATGG TGGCAGCCAC CAGTGGGCGT GGGGCCCCCG GGGGAGAGGA TGCCCCAGAG
GTGCATGAGC AGACCTCGTA ACCGTCTCC GAGCGCTCT GTTCATGTTG TCCTGGAGGG GCGCGGGGCC CCTCTGCCGC
GTCCACGCCC GCAGCCACAG ATCCATCGGC CTGTGAGTCT CCACACACCA GCCAGTCCCG GGCCGTGGAC TGTGGGTACC
CGGGTGCCAC CTCAGCTCG CCATCCAGCA CTTTCCAGTA CTCTGGCCA CGGAAGAAGT AGGAGGCACC GTNGGACCAG
CGCATGGCGT

SEQ ID NO:1768: (Length of Sequence = 361 Nucleotides)

AACTGGAAAA CCAAGACTGG TAGACTCTCT TTTCTTTCAG ACAATAGGCA GGAGCCAGGC GGAGTCCAGG GATTCTTGGA
ACACCTATCT TTTCTTCGGA GGACACTAAG TTCTATTGA AGACAAAGTT CAATATGGCA ACAGGACTGA TGGGACACGA
AGGAGTCGCT ACCGTGATTT GGTGACAGTT CTTCAAAACG ACAGTNTCTC AAGGAAAGGT GGACCTAGGA ACTCTGAAC
TTTTGGGTG CTTAAGTGA GAAATCAGCA TGGCTCAGGC AAGTCTCTG GCTTGTGAAG GCCTAGCAGG TGTGAGTTTG
GTTCCTACTG CAGCCAGCAA GAAGATGATG CTGAGCCAGA T

SEQ ID NO:1769: (Length of Sequence = 389 Nucleotides)

CAACTACCGC AGCGCCAACT TCAGAGAGCA CATCCAGCGC CGGCACCGGT TTTCTTATGA CACTTTTGTG GATTATGATG
TTGATGAAGA GGACATGATG AATCAGGTGT TGCAGCGCTC CATCATCGAC CAGTGAGCAG AGTCCGTGCT TGCTATCTGT
CTCATGTTAC AGAGCTTCCA TTACATATTA AACGTGAAAT CTATGACTCC TGTACCTTAC CTGTTCAACA GACCTGAAAA
TGAGCCATGG CATTGGGACA GGGTCAC TTC TACAGGGGA AGTGGGTCCC CAGGTCAGCC CTTCTCTTCC CTTTGGGCTC
TTGCCAAAGN TGTCTTCCCC TACTGTTAAN CTGTGTGTC ACACGGTCCA GTTCGTATTG GGTCTCTCG

SEQ ID NO:1770: (Length of Sequence = 394 Nucleotides)

GCAGTTTAGA GGAAGCTCCT TCTGGGCAAG GTCAGGCGGT CCTCCTTCCC TCTCTCCTTC CCCTTTGTCC CAGCCTCAAC
TGACTCTGGC TGTGGGAGGT GTGGAGGGTC CTTAGGCTTC CCTCCCAAC CTGGCCTCCA CCAACACCCC TAACAGGAGG
CCGTGGAAG GCTCAGCCTC TCTCCGCAT CCTCCTCCT TCTGCTTAT CGGAGGGAGC CAGGGTCCCC TAGGCTGACC
CTGAATCCTC TTCTCCTCT CATGGGAGGG GGGCAGGAAT CCAAGAGGAG ATGAAGCCAG CGGGACCACA TGGCTTNGTG
GCTTNGACAA ACAAGCTCAG GGAGGAAATG AGGAGGCGNC GGCCTCAGAG GATTGCAACC CTGTTGGGCA CAGA

SEQ ID NO:1771: (Length of Sequence = 373 Nucleotides)

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SEQ ID NO:1759: (Length of Sequence = 386 Nucleotides)

ATATATTTTT TTGTATAAT TTCTTTGTAT TTTTTCCTG CAAGACTTGG TGTTGGCGGC ACTGTTGTAG TTFAACTTCA
 ATCCCAAATT CCATGAAATA GAAATCAGAA GTAAAGGTTG AGAGGGGAGG AAGGAGGGAG GCAAGCCAAG GAATAAACAA
 GAGTTTGA CT AGAAAAAAG AAGAGGGTAT GTGTGGTGGG CATTCTGGG CAAGGOCATT CCTTGAGGGA GGGGGTTGGC
 AGGCAGCTTG CCTCTGCCTC ATGCAGGGGA GGGAGGAAAG ATCCCTGGG GACCTGCGAG TCCCTCTCTC CTAGGGCTTC
 CTGCTCCAG GGGAAAACT AATACCAGAG AGGGATCAGC CACAACCTNA AACAGGGCTC TTCACC

SEQ ID NO:1760: (Length of Sequence = 395 Nucleotides)

CTTCATGCCT CTGGCCGGGT CCAAGCTGGC CAAGAAGAGG GAGGAGGCCA TTGAGAAGGC CAAGCGGAG GCTGAGCAGA
 AAGCCCGAGA GGAGCGAGAG GNGAGAAGGA GAAGGAGAAG GAGCGGGAGG AGAGCAAGAG CGAGAGCNTG AGGCAGAGCG
 GGCGGCTAAG GCGTCCAGCT CAGCGCATGA AGGTGGCTC ANTGACCCAC AGCTCAGTGG TCCTGGCCAC ATGCGGCCAT
 CCTTCGAGCC ACCACCAACC ACCATTGCTG CTGTGCCCC CTACATGGG CCGACACAC CTGCCCTTCG GACTCTGAGC
 GAGTACGCC GGCCCCACGT CATGTGCCC ACCAACCGNA ACCAACCTT CTACATGCC TTAACCCAG GACCC

SEQ ID NO:1761: (Length of Sequence = 378 Nucleotides)

CCCACCAGAG CATTTCAACA AGGCTTACCA CACAGGCCCC AGTACCTTTC TACTCTACAA TGAGGCTCAG AAGCTCAGTG
 TACCACCCCA TCCCCAGGAG GCCCCTTAG ACCAGAAATC CCAAGTCCAT TAGCTACAGG CTGATATTCA GGGACATCGG
 TGTAACAACA GAAGTGGGAT ATGAACATA TCCTGATTT TTTTTCCTT TTTTTCCTT TTTTTCCTT TTTTTCCTT
 TCTGTCCCC CAGGCTGGAG TGCAATGGCG CGATCTTGGC TCACTGCAAC CTCGACTCT CAGGTTCAG AGATTCTCTT
 GCCTCAGCCT CTTAACTGGG GTAAACAGACA CCGCTACCA TGCCCGGCTC ATTTTTTT

SEQ ID NO:1762: (Length of Sequence = 351 Nucleotides)

TGATAAATAA AGAAGTTCAA AAAAATCTTT TAATAGAAGC TATAAATAG CAGATAAGCT AAGTCATTCT CATAAACAC
 CATTGTGAT TTGAATGCGT GCATTGTGGC CTGTACTTT TAACTAGTCT CACTAATTTA TAGTTATATA TGATGTAGAT
 CTAGATTGTG ATGTACACTA AGTGGGTGA TCCYGAGATC AAGCTATGAT TGCTGCTTGC GTAAAGTGT CCYTTGGGA
 AATAAATAAT CTTTCATATC GTTAACTTT GGTATAATTG GTTATTTATG CAATGTATTG TTGTGGTTGT CAACTCAAGA
 TTGTATTCTC ATCTGGGGAC ATTATGAATC T

SEQ ID NO:1763: (Length of Sequence = 157 Nucleotides)

GTGTWFACTT AGTGTGTAAA GTGAACAAGA AAAGCAGCAT AATAAAGGAG CTGTGTTTTT ATCAGAGGAG CCTTCCTTCT
 GAGTTTTTAC ATAAGTTGAT GCCTTCACTG CACTTTGAA TACAGTGCTT TGAATGTGA AACACTTGAA TAAAATG

SEQ ID NO:1764: (Length of Sequence = 321 Nucleotides)

GCTCCTCTGC CTTCACCTCC TCCAGCTCT NACCCTTGG CAACGCACCA CTGCCAGTTC CTCTGGGGCT CTCAGAATCA
 CTGGAGTACT TCTGCAGCTC TCTTGGATGA CCTAGGGGTG CAGCAACAGG CACAAAGCTC TCCTCCAGGT CCTGGATTTT
 TTTATTTCTT CCTTCCTTC TCCTTGGTGT ATTTCCTG TGAGNGTCTG ACTCTATCAC TTTCAAAGCT GTGCTGTGGA
 TTTGGGTCTT TAGATGAGGC TTCATGCCCT GGNATAAGCA AAGGAGCTG ATACAGAGTT GGCCTGCAGG GAGCAGCTTT
 T

SEQ ID NO:1765: (Length of Sequence = 420 Nucleotides)

TCAAGCCTGT NATCCTAGCA CTTTGGGAGG CCGAGGTAGG CAGATCACT GAGGTTGGGA GTTCGGGACC AGCCTGCCCA
 GCGGGGAGAA AACCCGTCTC TACAAAAAT TTTAAACTT AGCCAGGCGT GGTGGGCAT GCTGCAGTTC CAGCTACTCG

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AAATTTAACT TCAACAAGCT GGTGATGCC AACTACCCAT TCATCAACAT TCGGTCAAGT GGTGTGGTTC CTCAGAGTGC
 ACCACCAGTG CCAACAGCCT CTTCCTGGTT CCATTTCCCA CCTCTGGACA CCCATTCTCC AACCAATGAT GTGCAGCCGG
 GACGGTCTTC TGCTAGCTCC CTAAGTGCTT CTGGCCAGGA GTCCAGTAAT GGTACTGATA GAAAGACTGA GCTTTTCAGAG
 CTGGAGGATG GCTCAGCTGC TGAAGTGGGC CGGGGTGTGG ATCCCGTGTG CTCCAGGAAT GCCATTGGTG GAGGAGGGAT
 TGGCCATCAG AAACGCAAGC CTGACATAAT GCTTCCTCTG TTTGCTAGGC CAGGGATGTA CCTGACCCC ACAGTCCTTC
 GT

SEQ ID NO:1754: (Length of Sequence = 397 Nucleotides)

CAGTGGCATC TATGGCTCTA AAATGGAAAG GAGGAGTCCT GGATTCAGGC TACTGACTTA CTCTGTGAAT TTACACATAA
 CTTCCTTTGA GCCACAGATT TAGCATTCTA CCAGTCACCT GATATTTCTG AGCAGCCACA ATATTTTAAA ACTATATTTA
 AATCTGAATT TGGATTTAGC AGAATTTTAT TTTTCCATT TCTATTTCT ATGGTCACTA AATTGAAATT ACAACCATG
 TAAAATTTGA TATCATTAAT TATGTAGGAC TTTATCCAGT TTCAAAGTAA AGATGTCTCT AATGTAAATTA ATTGTNATTT
 TCACTGATGA GACTGAAATA CAATCAGTCT GTATTGTGTG GTGCGTATGT ATCAGTGGTA AGAGGCTATG ATTAGAC

SEQ ID NO:1755: (Length of Sequence = 353 Nucleotides)

GAATTACTCT GTTGTTCACC TTTTGCTTTT TGCAGTGTTC GTNCTCTAT CTGTATTTTG AGCTTAGTGC TAGGACTGAG
 AGGCTGCACC ATAGGGAATG TATGGGAGAT GGTGAGGGGT GCCAGTNAAG GGTGCGTGA GGAGAGGCCT GGGCTCCTCT
 ACTGGATCTA CACTCTGTCC CAGGTTTTTA GATCCCACTG AGCCAGCTG ACTGAAAACA AGGACAGTCA GGGTGAAACT
 TCTTTTGCCA GAAGTGTGGC CTGAGTTGAA TTTCTGGGAG GATGACGAG ATGTCTGCTG CAGAGCTGGG CTGAGAGTTC
 TNCATCTAG CTCTGACTTA GTTCAAGGGG CCT

SEQ ID NO:1756: (Length of Sequence = 184 Nucleotides)

TGGGCTCGGA GCATCGAGCT GGACATGCGC ACCATTGCCA CTGCACTGGA ATATGTCTAC AAAGGGCAGC TGCAGTCTGC
 CCTTCTTAG CCCCTGTTC CTCCCCAAC CCTATCCCTC CTACCTCACC CGCAGGGGNA AGGAGGGAGG CTGACAAGCT
 TTGAATAAAA CACAAGCCTC CGTT

SEQ ID NO:1757: (Length of Sequence = 425 Nucleotides)

ATTACAGGCG TGANCAACAC ACCTGAGCTA ACTTCCTGGC TTTTCAATCA AACCATCTTT GTCACCTCCT GTCCCCACCT
 GAAGTCAGAA AGCCTGAAGA GAAGACGGCT CTATTGCCNC AGCTGGAGTG TGGTGGCACA ATNTCAGCTC ACTGCAACCT
 CTGCTCTCTG GGTTCAGGCG ATTCTCTGT CTCAGTCTCC TGAGTAGCTG GGATTACAGG TATGCACCAC CACGCCCTGC
 TACTTTTTCG TATTTTGTAGT AGTAGAGATG GGGTTTCACC ATGTTGGCCA CGCTGGTCTC TATCTCTGA CCTCGTGATC
 CACCTGCCTC AGCCTCCCAA AGCGCTAGGA TTACAGGCGT GTAAGCCACC ATGCCCCGCC AATTTTGCCA GTTTTTATTG
 GGCTATTCTT TATTGAGATC TAGGG

SEQ ID NO:1758: (Length of Sequence = 407 Nucleotides)

AGGAAGGCAT AAGCTAAGCA TCCTTCTAAC CAGTTCCCAA AGTCCCCTCT GCCTCCATGT ACCAGCTGAT CGCAGAGCTG
 GACTGGGGCA GGCTGGGCTT CCAGGAAATT CCTGAAGTTC TGAAACAGCT TCCCCTCTAG AGAAGCCCAC CCAATGTGTT
 TTTTAGTGAC AGGAAGAAAG GAGGGAAGAG CTGATGTGGT GTGGCCTGCC CATATCATAC AACCCACCA GGAGCAGGGC
 AGTTCCCAAG GTGGGTGCCC GTAGATCTGG GAGGCCAGGC TGGCATGATT CTTGTGAAGA ACTGTGCCTG TNCGTGAGG
 GAGAGGCCTG AGCCCTCTCA GAAGCAGGGA CAGCCACAAC TGAAGAGCAC GCCAAGCTGA GGCAGCAGCA GCAGCTGGGG
 GAGCAGT

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TTTACACGNC AGTAACCCCTT CAAGTTCTGC CACCCGTGTGT GGGGGTAATG CGTGCAGCT AAAAATATGG GTTTTACGNA
ACANCCATGG CCTAAGGGGA TTTCTCATAG G

SEQ ID NO:1748: (Length of Sequence = 428 Nucleotides)

AATAGCTTCA GCTGATTGGG TGAGTCCTAT TCATGTTATA AAAGGTACTC TGCCTTCCTT AACATTCCAT AAATCTTAAT
CACATCTGCA AATACCTTCA CAGCAACATC TAGACTAGTG TTTGACCCAA CAACTGGGCA CAATAGTTTA GCCAGCTTTA
CACATAAAAC ATCATCACAC TATGCTTCTC TTCTGTGTTT TTTGTTACCA CGTATCTGTT CCATGTGTTT TNCCTTGTAT
ATATCCTATC CTGTCAATAT TCTCCTATGG TTTTGIGGAA ACTATAAGCC TTTGGGGGGG TAAAACACTA TATCTTTGTT
CAATTGTTAA TACATCGNAT AGTATATCAT GCCTGGGGGC ATTGGTTAAA CCCCCATTT AAATACAGCT NGGCAGCAGG
ATTTTAGGCA TTCCGTCATG GTGTGCCA

SEQ ID NO:1749: (Length of Sequence = 478 Nucleotides)

GGTTTCACCA TGTTGGCCAG GTTGGTCTCA AACTCCTGAC CTCAGGTGAT CCACCTCAGC CTCCTAAAGT GCTGGGATTA
AAGGGGTGAG CACNCACACT CACACCTGGC CCTCAACCAT CTCCTTCACC TTCTGCTCAT GACAGTTTAC TAGAATTTTT
TTCCCTTGAG ACTGAATGTT AAGTCAAAAA CAATAAAAAA TTGCTAATCA TTACTATGAC TCCAGAGCTA CTGCTTCTT
TAAATATTCC TGAANTTATA AAATATAAAG CCAAAGCAAT GAATTTCTAA TGGTGGAAAT GTAGACACTG TGGGCCCCCT
GGCTGTGTTA TTTTCAGATG GGGCAAGGGG ATATTCCTAA CCTATTTTAA AAATCATGCC AGCCTAGATA ACTATGTGAA
AAATATATGG GTGTCTTAGC AAAACTATTA CCTAGCAGCC CTTTGGCAGT TTTACATTAA AAATCCCTTT ATTAGGTT

SEQ ID NO:1750: (Length of Sequence = 439 Nucleotides)

GACATTTTAT TTCCAGGTTG GCACGTGTAT AAGGCACAGG GGCAATGGC TTTGGGGTCC TGGAAGTGA AATGGAGACA
GGTGTGTCTC AGGTGTCCCT GCCTCCACCA CCCCCTAAGT GCACCTGAGA CAGGACCAAT GTTGGTGGTT CCAGCCCAGG
GTCTGAAGG GTNCCACTGG CTCTAGGGGA GAGCCATGGG GACAGCTCCC CAGGCGGGAC CCTCTACTCT CCAGCTACCC
AGGAGGGACC CTNCTCTCT AGGGGGCGAG GCCAGCTCCA AAGTGCTTNG TGGCTCCCCA GGCTTAAGGG ACCAGNCTGC
CAGGGAGGGC TNGGNTCANA GAGAGAATAG TAAGATNAGA CGAGGAGAAG CACCCCACTA GCACGGCGAT TGGANAACAC
TNTCGGCGGT ACTCGTCATG TGGGTAATTT GCCAANTTC

SEQ ID NO:1751: (Length of Sequence = 347 Nucleotides)

CTCTATTACT TATGATTACA CCATGGCAAT ATTCTTTTTT CACCAGGAGC TTTGGACCTG CGCAGGTGTG GGCATGTAAT
CACCGGAGC ATGTAGTCAT CTGTAGAAAT CACAGGCACA CTCATGTTTG CTCTGGAAGG AATCTGTTTT CCACAATGAC
TCCCCCAGC TAATGTACAC ACTGGCATTG TGCATGCCCT CCTCACACAT GGGGCACCAG CCTTGCTTCA GAACCAACCA
AACTCCACAG AGGCCCTTAA ATATGGGCTA GGGACAGATT TTCTTTAAGA AAGAGTTAAG GAGCAGCTT ACAAAGGGAC
AAGGCAAATT CCACAAGTCA GGCAGCA

SEQ ID NO:1752: (Length of Sequence = 297 Nucleotides)

GGATATTCTA GCCATACAGA TTCAATGGAA CAGAGAAGAG AAAGGAGGTT CCATTGGCAC CATAGTGAGC CATTCATTG
CCCAGGGAAG NNGGTGGGGG CTAAGGGGCT AGGTTTGGTC CCATGGCTAC ATTAAATGCT TGGCATGACT CCAGGGCTNC
TCTAGTTAGT GGCTCCAGCA CAGTATGAGT TAGGTGAGTT AGGTGTAGGA GTTTGGGGAC AAGGAAAAG GGAGGAGGGG
TCCCTAGAGG CTNGGTGCC ATTACATAGA CTCAATTGG TCAATGCGCT GCTTTAG

SEQ ID NO:1753: (Length of Sequence = 402 Nucleotides)

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TAAATTGTTA ATAGAARTTT CCAGTTTTCT TTAGTCTCTG GCTACTCCAA GTACTGGTIG CTGTGAATGA CCTTTTCATG
AG

SEQ ID NO:1742: (Length of Sequence = 322 Nucleotides)

CCCCCAGCC AGGAAAAAAA AAAAAAGCTT TGAGGAATGA GAGAGGGTGA GATGGGTGCA AGAAGGTGCT GGGCAGCCAC
GGGCGCCACG CCTCANTGGC CCCAATTGCC GAAGCCGATC TCCTGCTTGT ATCTGTTAGT GAGGATGTTG GCTTTGCCCG
TNAGTTTGA GAGCACAGTG TGCAGCCCGC GCAGGTGGTA GTGGAACINC TGTTCAGGT CTTCTTCGCC GCGTCCGAA
CCCTCCAAGT GGGCCAGGTC CACCAGGATG TCCITGGGAC TTCCAGGCAC TGCCCTNCTC GNTCCCAAGC CGGTNGGAGG
CG

SEQ ID NO:1743: (Length of Sequence = 250 Nucleotides)

ATGGGTAGGG GGCCAACGCA GTCACGCGG TCCGCAGTCA CAGTCCAGCC ACTGACCGCA GCAGCGCCCT TGCCTAGAGC
CGCTTGCAGC GAGAACAATG AATTGCCAAC GAGCAGGAGA GTCTCAAGGC GCAAGAGGAG GCCAGGGCTC GACCCACAGA
GCACCCINAG CCATCGCGAG TTTCGGGGCG CCAAGGCCAG GAGAAGCCGG CCATCCCGCA GGNCCGNGTC TTTCAGCGAG
ACGNGAGTTT

SEQ ID NO:1744: (Length of Sequence = 247 Nucleotides)

GATGATTGAG TGTTCITTTA AAAATAAAAA CCCCACAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA GTGTAACAGG
TTAGCCATTA ACACAGNATA AAGAWGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGKCT GGTGKCCGA
CGTCACAGTG GATGGCCCTG CGTGGCTGGG RCACAGACAG GGNGCAGGCA TGGCACCTTT CGNCACGAG AGCAAGCATA
GGCTGTA

SEQ ID NO:1745: (Length of Sequence = 379 Nucleotides)

TTCTAAACCA GTTAATAAAT TCATTCCACA AGTATTTACT GATTACCTGC TTGTGCCAGG GACTATTCTC AGGCTGAAGA
AGGTGGGAGG GGAGGGCGGA ACCTGAGGAG CCACCTGAGC CAGCTTTATA TTTCAACCAT GGCTGGCCCA TCTGAGAGCA
TCCTCCCACT CTCGCCAACC TATCGGGGCA TAGCCAGGG ATGCCCCAG GCGGCCAGG TTAGATGCGT CCTTTGGCT
TGTCACTGAT GACATACACC TTAGCTGCTT AGCTGGTGCT NNGCCTGAGG GCAGGGCAGG AAAATCAGAA TAGCATTGCT
TTTCTCTGGG GCAAAAATGG GAAAGTTCAG CGGNGNCAG CAGGAATCAA GTGGGCATT

SEQ ID NO:1746: (Length of Sequence = 472 Nucleotides)

TTCATGCTGT CCCTTCATTG AATTTTAGAA TGAITGAAGA TAGTGGGAAA AGAGGAAATA CCATGGCAGA AAGAAGACAG
CTGTTTGAG AGATGAGGGC TCAAGATCTG GNTCGCATCC GACTCTCCAC CTACAGAACA GCATGCAAGC TTAGGTTTGT
TCAGAAGAAA TGCAATTTGC ACCTGGTGGG CATATGGAAT GTCATAGAAG CATTCGGGA AAATGCTCTG AACAACTGG
ACCCAAACAC TGAATCAAC GTGTCCCGCT TAGAGGCTGT GCTCTCCACT ATTTTITACC CAGCTCAACA AACGGGNTGN
CAACCACTTC ACCAAAATCC ATGTGGAGCA GTCCATCAGN CTNCTNCTTA ACTNCTGCT TGCAGCGTTT TGATNCCGGA
AGGCCATGGT AAAATTTTCA GTATTGCTT GTCAAAAANG GGTTTTAGGC NCCATTGTG TGGGAGGGGA AG

SEQ ID NO:1747: (Length of Sequence = 351 Nucleotides)

AGGATCAGAA TACTTTAATA AGATACCAGT GTCAAAATAC ATTTCCITAT AAAGTTAAGC TCCCATACAG TTATAATGTT
GTCAGTAGGA ATTCGACAAT ATAATAACGT TCATGAAATC GTTACGTTGA CAGGTAGGGT TAATATGAAG CTTGGAATAT
TTTCCAGTGT TTTAGTAAAA CTGCAAGGGT AAAATGCCCT TAATGCCAGG GCAACACACA CAGGNAATCA AATACCAGCA

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GCTGGGCAGA GCTCTAACA GGGGCAGGG CTCCTCTGCC AGCCTGTGGG CATGGCAGTC ATTCTTGAA GGGGCAGGAC
CTCCGGCCTT GTCCATTTCG GGGGGAA

SEQ ID NO:1736: (Length of Sequence = 356 Nucleotides)

GACACAGGGA GGGGAACAAC ACACACTGGG GCCTGTGGG GAATGGGGG TGAGGGGAGG GAGAGCATCA GGACAAATAG
CTAATGCATG TGGGGCTTAA AACCTAGATG ATGGGCTGGG CGTGGTGGTT CACGCCTATA ATCCCAGCAC TTGGGAGGG
TGAGGGGGC GGTTCAGAG GTCAGGAGAT CAGACCATC CTGGCCAACA TGGTGAAACC CCGCCTCTAC TAAAAATACA
AAAATTAGCC AGGCATGGTG GTGGTGGCT GTAATCCAG CTACTCAAGA GCCINAGGCA GGAGAATCAC GTGAACCTGG
GAATCGGAGG TTGCAGTGAG CCAAGATCAT GCCACT

SEQ ID NO:1737: (Length of Sequence = 324 Nucleotides)

TGTTTTCTAA TGATTTTAA TTTTTCAGAG GAAAAATAATT TCAAGAAATA AAACATAATT CCCCTGAGTC CTATTGAAAT
TAAATATGA AAAACAATGA ATGAATGATG CATTTCTTATT AATGGACTGT AAGAACTGA TATAATGGAC TTCATTCTAC
AATTCGGTTT CTATTGTCT TACACATGCT CCTCGAAGCT AAACATTTTA GGACCTAAC ACCATTTCCT TAGTACAATT
ACTAAAAGAA AGCTTTGGAT AATATAATAT CAGGGAAGAT AGTACAACAT AGTGAAGGAT GACATAGGAG AGATGTGAGG
AGCA

SEQ ID NO:1738: (Length of Sequence = 316 Nucleotides)

GGCACCCCTGG GCATGTCCAG CCTGGAGCAG CTGGAGCAGA ACTTGGCAGC AACAGAGGAA GGGCCCCCTGG AGCCGGCTGT
CGTGGATGCC TTTAATCAAG CCTGGCATTG GGTGCTCAC GAATGTCCA ACTACTCCG CTAGGCCCAT CATGGCTCAG
GCTGCCAAG GCTTTTNGT CACCTCTTT GTTCTCTCAC ACTGACAGT CTGGCCTTA AGCTGACTTA GAAGGGTTT
TCTGAATTGT CTAGATCCAT GCATTATTT TCTAGCTTC TGCCCTGCTC CCTATTCACT TTACACTGTG AAAGGT

SEQ ID NO:1739: (Length of Sequence = 398 Nucleotides)

CAAAAACCAT CTCAGGATAC TGAGAAGCCT CTGGAACCTG TGAGTACTGT TCAGGTAGAG CCTGCAGTTA AGACTGTAAA
CCAACAGACT ATGGCAGCAC CAGTAGTCAA AGAAGAAAAA CAACCTGAGA AAGTCATCAG CAAAGACCTT GTTATAGAGA
GGCCTCGACC AGATTCAAGA CCAGCAGTTA AAAAAGAATC AACTTTGCTT CCCAGGACCT ATTGGAAAGA AGCTAGAGAG
AGAGATTGGT TTCCAGATCA AGGATACAGA GGTGAGGCC GAGGTGAATA TTAATCCAGA GGTGCAAGC TATAGAGGTT
CTTTATGGGA GGGGCGTGGC AGNGGGTGG TAGGGGGACA CACTTCGAGA TTATCTCAG TATANGGGC AATAAGCC

SEQ ID NO:1740: (Length of Sequence = 376 Nucleotides)

GAATAAATTC GCAAACTATG CATCTGACAG AGGACTAATA CCCAGAATCT ATAAGGAACT CAAAAATCA GGAAGAAAAA
AAATCCCATC AAAAGTGGGC TAAGGACATG ANTAGACAAT TTCAAAAAGA AGATATGCAA ATGGCCAGAA AGCATATGAA
AAAATACTCA ACATCCCTAA TTATTGGGGA AATGCAAATC GAAACCACAA TGCAATACCA CTTTACTCCT GCAAGAATGG
CCATAATTTA AAATCAAAA AATAATAGAT GTTGGGTGG GATGTGTTGA AAAGGGAACC ACTTTTACAC TGCTAGTGGG
GATGNTAAAC TACTTCGGCT ACTATAGNAA ANCAGGATGG GNGGATTCCT TAAAAG

SEQ ID NO:1741: (Length of Sequence = 322 Nucleotides)

CAAATGCAA AATCAAGACT TGTCATAAAN TGATGTCCA TAGCCTATAC TGTTTAAAT ACINTAACTN TATAGTAAAT
CTTGATGTTT AATACAGCAA ATGTTAAACC AAGCTTTTAC TACAGAAATA AACAGAAAT TATAGGCGCT CATTATCCTT
TTAGACAAAG TTGATTTGC TTTGCTATR TTTTGTGTTA GGNTTTGTG AACTATTTCA CAAACAGGNA CAWRATATT

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SEQ ID NO:1729: (Length of Sequence = 301 Nucleotides)

GGAGTTTAAA GTATTTATTG ATGTGTTTAA ACTGTGTACA TTCTCCACAG ATCATATTAA GGNGTTTCKTA GKGGAAGTTT
 AATCTGTGCA TAGTGGGTAG YGACATGAWT AGGGTCAAAG GGGAGGYAAA AGGAAAAAAA CAAAACAAAA ACAGTCACAG
 GAAAWTAAAA ATACACCMCA GGTACCAGA ACCTTCAGGT TTAAAATAAA ANGNAAGNAA AAGCAGAACC AGTGAGCATC
 GGCATCAACC TGTACAAGCA TTACAAAAGG CTCCTGTGAC GGAAACACAA TTGTTCAAAG G

SEQ ID NO:1730: (Length of Sequence = 312 Nucleotides)

GACGRACGCT CTGCCCACGC CCGAGCGTG TACACATGAT GTNTCTATG CATTACCCCT GCCCCCAGC CCGCCCTGCA
 GAGGACAAGA TGGGTGGCCC CGGCTCCCTT TCCCCTAACG GCCCCGCCC GCTGTGCAGC CGTGTGCGTT GCGGTGTGTT
 TCTGTGTAC TGGCGTGTCA CGTGATGTAG CCGTGTGTC TGACATGAGC CCGTGGCCCC TTCTCTGTTT CTCGTTGGT
 TTCTAGAGCT CTCCTCCCTC CTTCTCAGA GGGGACAGGA CTCCTGGGGT CTGGCTCGGG CCCAGAGCCA GG

SEQ ID NO:1731: (Length of Sequence = 392 Nucleotides)

ATCGGCTATG GGTCCGGTG CGTGACAGAG GAGTGCCCGC TGGCAGTCAT CGCTGTGGTG GTTCAGTCCA TCGTGGGCTG
 CGTCATCGAC TCCTTCATGA TTGGCACCAT CATGGCCAAG ATKGCGCGGC CCAAGAAGCG GGCGCAGACG TTGCTGTCA
 GCCACCACGC GGTATTTTCG GTGCGGACG GCAAGCTCTG CTTATGTGG CCGTGGGCA ACCTGCGCAA GAGCCACATT
 GTGGAGGCCC ACGTGGGGC CCAGCTCATC AAGCCCTACA TGACCCAGGA GGGCGAGTAC CTKNCCCTGG ACCAGCGGGA
 CCTCAACGTG GGCTATGACA TGGCCTTGA CCGCATCTC CTGGTGTGCG CCATCATCAT TTTCACGAG AT

SEQ ID NO:1732: (Length of Sequence = 352 Nucleotides)

GTACCTAGTA CCTTAGATAA AGGGAAATGT GTGATTCTTA ATGAGCTTTA AAAGGAAACA ACTTCTTTTT TTTTTTTTTT
 TTTTGTAGAC GGAGTCTCAT TTTTGTCCCC CAGGCTGGAG TGCAGTGGCG CGATCTCTGC TCACTGCAAG CTCGCTCTC
 CGGGTTCACG CCATCTCTCT GCTCAGCCT CCCGAGTAGC TGGGACTACA GGCTCCACC ACCACGNTCG GCTAATTTTT
 TGTATTTTWA GTAGAGACGG GGTTCACCG TGGTAGCCA GGATGGTGTG GATCTCTGA CCTCGGTGAT CCACCCACCT
 CGGNTCCAA AAGTGCTGGG GATTACAGGC GT

SEQ ID NO:1733: (Length of Sequence = 321 Nucleotides)

TTTTTGTGTT GTTGTGTTGT TTGTTGCAG AGTCTGCTC TTGATCTATC TCCCAGGCTG AAGTACAGTA GTGTGATCTC
 GGCTGTCTGC ACCCTCTACC TCCCAGGTTT AAGCAATTCT CATACCTCAG CCTCCTGAGT AGCTAGAACC ATAGGCACAC
 GCCACCATAC CTGCTAACTT TNCIATTTTT AGCAGAGACT GGATTTTGCC ATGTTGGCCA GGCTGGTCTC GAACTCCTGG
 CCGCAACTGG ATCTGCCCAA CTCAGCCTTC CAAAGTGCTG GGATTACAGG CATAAGCCAT TCATGTGCGG TIKTCAACT
 G

SEQ ID NO:1734: (Length of Sequence = 208 Nucleotides)

AAGTCAACGT ATCTATTTTT ATTATGAAAC ATTAAATTTT GACACATTGC CTCATTGCT TTTTAAAT CTATTATCTG
 ACTTAAACCT ATTCAGCAA AATGCCAATA AATTATATTA ATCATACTTT GGGTCTTTTT AAAACTAGGA ACATAATATG
 TTTTATGATA AACAATAATA CTAAATCTGA GTTGTATGAA CTGTTAAC

SEQ ID NO:1735: (Length of Sequence = 347 Nucleotides)

TCTATTACCT GTACAGTATG GTTTATACGT TGGTGAGTTT CTAAGGGGGA AGCCGGCCAG GGAGCGAGCC CAGAACGGAC
 CGGACGCTG TNCACCCCCA GCCCTGCCCC TTGGCCGAG AGGCTCAGC CCTGGGGAGG GAGGGGGCAC TGGTGCCCCC
 AGCCTCTCCA ACCCCCAAAC TGCTGCTGCG GGAACCCCC CCCACCCGCG CTCAGAGCC CTCCCCCTTG GACTAGAGCG

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TGTTTTTAAA AATGAGAAAA TTTGGAGAGA GAATACTATT ATGTCAACGG TACAAGACTC TGAATCTTGA AGATGTAGAT
GGATATAATA TTTAGACTTT ATATACACCC ATAGATATGT ATTTATATAT GCATACGTTT TGTATAAATT TACAATTGAC
TTTTTGTATT CTCCTTNCIG TCATTACAAG AATGAGATGG AAACCAAAAT AGTTGTNCCA TCCTCTTACC CAAAGAGGGA
TACTGAAAAG TCOGGTATGT GCATGCACCT GTTCTCTGG GGTCAAATCT G

SEQ ID NO:1723: (Length of Sequence = 369 Nucleotides)

GATTGCCCGC TCCCTOGATT CCTCCTGTT GTCTCCAGAA GCTGCTGTGG GCTTGCTAAA AGGGACAGCA CTGTCTCTAG
CCOGATTACC TTTGGATAAG ATTACOGAAT GTCTTAGTGA ACTATGTCTT GTTCAGGTTA TGGCATTGAA AAAGCTGTG
TCTCAAGAGC CCAGCAATGG CATATCCTCA GATCCACAG TGTTCTTGA TCGCCTTGA GTGATATTA GGCATACCAA
TCCCATGTG GAAAAAGGAC AGACTCATCC GTGTCAGAAA GTCATACAGG AAATATNGCC AGTTTTTATC CGAGGACTCT
AAAATAAGCA CCGAGCTGNA TAATCGGATT GTAGAGCGTT GTTTCAGG

SEQ ID NO:1724: (Length of Sequence = 231 Nucleotides)

ATGTATTGTT AGTTGATTC CTTCAAATTT TATACATATT TACTTTCTGT TAAAGAGAAA AGGATAAAAT GGTATAAAAA
AAGATAAAGC TATTAATTAA GCACGAGAGA GAAGATAAAT GGATATTTTC CTTGTGTGAG GCTAAGACAG AWGCAAATCT
CGTTANGAAA AATGCCACCC ACACAACAGG AANTTTATCC AAAACAAAAC AAAAGCAGTT ATAGANCCCC T

SEQ ID NO:1725: (Length of Sequence = 317 Nucleotides)

GTGCAGGGTA GGGTACATAT GGCTCTGTCA GAAGAATACC ATGATTTAAG GGAAGAAAGT ACACAAGGTA CATGGAGGGT
ACACAGGGAA AGTACATTA TAAACATGGA CGTGTGCAAA TAGGAAAGAC ATGACTCAGC ATGCTAGACA AATTGCACAT
GCCTACCCAA ACACGCTTAA GGGCAGACCC ATGACCATGA GAGGGGCACA CGTAGCTGTG AATGCAGGGC ACCGAGAGC
ACATGTTACT KAACATGAAG AAAGCATACG GGAAAAGCGT GTKTACACAT GNGCATGTTT AGTGGGGCAC ACCCAGG

SEQ ID NO:1726: (Length of Sequence = 282 Nucleotides)

CTCTTGAACC AGATGAGCAG CCACCGGAAA CAGAAGCAGA GAGAGCCGGA GTCTTGGGAA TCCAGGAAGT CGCAGAGCAG
GGGGTCCAGC ACCCTCAGGA GCAGCAGCAG TCGCCOGAKT TCGCGCTTCA TGGTCTCCTG GCTCTCTTCA AAGTTCCCTT
GCACGAGCTC CATGAAGCCA CAGAAACACC AGAAAGCATC CACCTCGTTC TGAATGACGT AGAGGATCGG GGAGAGAAGA
TCACTCATGC CCTGGACGTA GCGAGGTCG AAGTGATACA TT

SEQ ID NO:1727: (Length of Sequence = 285 Nucleotides)

GAGTATTGAT TTCAGGCAGG ACCCAGGTCC CAAAATGTTA GAAACAGTTA TCCTTTTTC CTCTGAGTTC GTTATTCTCT
GGGGCCCCAG TATCOGTGGC TTAACAACCC GGCTGGATAG AAGGCACCTC TTTCCCCACG TTCCAACAAG ATCCAGAGC
TGCTTCTCAT TGGCTGTGCC CTGAGTCAGT CACACTGGAC CGGAAGGTGA AAGGCCCTCA TTGGCCAGNC CGAGTTCATG
TGCCACCCC TGGGGATCCA GCTGTGGGNC TNCITTAACA GCATT

SEQ ID NO:1728: (Length of Sequence = 394 Nucleotides)

TTTTTTTGAT GAGGAGATAT AGCAAAGGGT CATTTGCCCC TCCTTCAGAA AACTTTTCTC CAAATCTCCT TTAAACATAC
TGCCTTATCT TTCCCTCCAT AACTCCACCA GTCTCTCCAC ATCCCCCTCC AAATCTCTGT ATACATAGGC AAGAGAGGGC
GATTCCCAGC ACAAGTCTAG TCCTGGGCGA AACTTCCATC TCTTCTCTCG CATACCTCCT GTCTGGGTAT GGGGATAAGG
GAGAGTATGG GATTTTGTTC TCCATTACAT GCTTTTTCAA AATTTCTGTA ATATGTGGCA CTTATAAAT CAGAACAGAC
AAAATGATAT CGGGTAAAC ATGCAACTGA GAGCAATTTG GGGAAAATC CTCAGGNCAC AAAATGTATT ACTG

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GTGCGGGGCA CCCATGTCTC GGTAGCACTG GGTGACAGCG CCTGCGGTGG TCAAGTCCCG GTATTCCCGG TACATGTTGT
GGGTGCGGCT CCGGGAGTCA TAGCGCAGCA AGATCCCGAA GTTCTTCAAC C

SEQ ID NO:1716: (Length of Sequence = 265 Nucleotides)

GTGCAGAATC TGCTCCTGGA CACCCACAGG GGGCTGCTGT ATGCGGCCTC ANANTCGGGC GTAGTCCAGG NGCCCATGGC
CAACTGCAGC CTGTACAGGA GCTGTGGGGA CTGCCTCCTC GCCCGAACC CCTACTGTGC TTKGAGCGGC TCCAGCTGCA
AGCACGTCAG CCTCTACCAG CCTCAGCTTG CCACCAGGGC GTGGATCCAG GACATTGAGG GAGCCAGCGN CAAGGACCTT
TNCAGCGGCT CTTGCGTTGT TTCCC

SEQ ID NO:1717: (Length of Sequence = 350 Nucleotides)

CAGCCCCCGC AGCCCTCTGG CCCCCTCCAT CTCTTGTCGG TTCCACCCA CCCCCCTCCT CGGCCCCGAGC CTTTTCCCGG
TGGGTGTCAG GNTCACTCCC ACTAGGGACT CTGCGCTAAT TACCTGAGCG ACCAGGACTA CATTTCCTAA GAGGCTCTGC
TCCAGGAGTC CAGGAAAGAC GAGGCACCTT GGCGCGGGG CCTGCTGGGA CTGTAGTTG CCTAGACAGG GCACCACCTT
GCACTTCCGG ACCCGCGCTG GAGGCGCCGT GAGGTTTGGT GTCTCGAAGC AGCAATTAAA AAGCAAGAGG ACTTCATGAC
CACCATGGAC GSCAATTAGG AGAAGATCAA

SEQ ID NO:1718: (Length of Sequence = 379 Nucleotides)

GACATGGAGA CTCACATGGC TGCAGAACAC TGTCAGGTGA CCTGCAAATG TAACAAGAAG TTGGAGAAGA GGCTGTATAA
GAAGCATGAG GAGACTGAGT GCCCTTTGCG GCTTGCTGTC TGCCAGCACT GTGATTTAGA ACTTTCCATT CTCAAACCTGA
AGGAACATGA AGATTATTGT GGTGCCCGGA CGGAACATG TGGAACATGT GGTGCAATG TCCTTGTTGAA AGATCTGAAG
ACTCACCTG AAGTTTGTGG GAGAGAGGGG GAGGAAAAGA GAAATGAGGT TGCCATACCT CCTAATGCAT ATGGATGAAT
CTTNGGTCA GGATGGAATC TGGATTGCAT CCAACTCCT CAGACAAATT GAGGGCTCT

SEQ ID NO:1719: (Length of Sequence = 197 Nucleotides)

CCTATATTTG TTAAATTTAT TTAAGACCAC CTCCTTACAA CTTCAGAGA GAAATACAA AACAAGAAAC AGACTTGGTT
TCAAATGCAT AACCAGGTGC TGGAGTTTAA AGCATTACTG ATAACATGT TACAGAAGAA TGGCAGCTTA CTCCAGGGCA
CTTCAGTATT CTGAGGAAT AAACATGATT TCGGAAG

SEQ ID NO:1720: (Length of Sequence = 203 Nucleotides)

GAGGGCGGGG CAGAGGGAGC ATGACGGGGA GAGTGAGGAG GAAAGAGGAA AGGAAGGCCA GGGTGGGAGG AAGGATCANC
TAAATCTGAG GGAAGAAGAA GGAAAGGAGA GGGCCTATTT CATAGCAGAT GCAAATRAAG GGNCTTGGGG CTAKTCAGGA
AGAAAGGGAA AGGGAAGGAA GGCAAGAGAG AGGGGTGAAG GGA

SEQ ID NO:1721: (Length of Sequence = 326 Nucleotides)

GGTGCAGCGA TGTTTAATGG CAATTGTTAT AAACCAAGCC CATGCACAAG TAGAAAGTGC CCGTGGAGCC GGCAGGAGGC
CCCCGCGCGG NTAGAGAACC ACAAGCCCGG CCGTGCAGCC CTCCCGCGG CGCCTTAAAT AGATTCTTCA CTATACTCTG
TATGTTACAG TATGTACAAG ACCCTTCCCC TCGGGGGACG GGGCGGACTN CGCAACGNGT TCCTATGTAC ACCACCTCCC
CTTTCGCCCC TGAGTTCAGT GGCCAGAGTC GGGTGATGGG GTAAGANAGG GCCAGAGAGG GAGGAAACAG ACGCAAACAT
GCGGAG

SEQ ID NO:1722: (Length of Sequence = 291 Nucleotides)

SEQ ID NO:1709: (Length of Sequence = 404 Nucleotides)

TTTGTCCTAT GTAGAAATGC CTATAGTAAG AAAACCCAGT AGAGAAAGTG GTTTTINAGAC CATTCGGCAG CTGCTTTGGA
CACCTGGAGC CATTTCTTTT ACAGATGAAG ATGCATTGTG TCATTGTCTC AGGATCCTCG TCCTGTGCT TCTCTGGCCA
CAAAATGTC TTTACCAAAG ATGATTTTAT TTCACTGTCT TTGAAAATCA TTCTTTATAG GTAGAATATG AAGATTCTCT
GAAATGATTC CAAAATGCCA AACTCAAACA CTATTGTCCG ATTTCTTTAC TTGCAACAAG AGAGTAGAAG GGACAGTATT
TGTTTTGTGA TGTGGGGCG TTCATCAGGG AGAGAATTG AGATAAGTAG GAATAGCAA TAGGAATAGT GAAATAACCT
AGAT

SEQ ID NO:1710: (Length of Sequence = 187 Nucleotides)

GGTGATCTGC CGACCAGAGG CCTTAACTC TGGTGTGAG TACTACTGGG ACCAGCTGAA CGAGACGGTC TTCACTGTCC
ATTCCAACAG CAGGAGCAGC GAGCGSCTGG ACCAGGCAGA GCACATGGAG GACAGCAGAG ACATGGGCTG ATGAATGCAT
TGGGCTTCAG CCGACCTGCA CTCAGTG

SEQ ID NO:1711: (Length of Sequence = 313 Nucleotides)

AGGGGCATGT NATCATTNA ATGATGINAT CTTGGTGTT TCCCTCATTA GCTGTAGACT ATCCCTCTC CTCCCACCAC
AATGTTTCTA TGATGAGTAA CAAACAGAAA GGAAATCACA TTTCATACT AAAACAAAA TGATCAGAGC CTTGATTCT
CCACTAGAAA CTACACGTAC AGTTAAGAGT CCACATGCAA CACCTTAAAT CACAGACTGA GGACCTCACA TTCTGACCTG
GGAGTCTCCT CCCCTTCCCC AGCCTTGGGC TAGCTTTGGC CTAGGCTCAG GTAATACTGA CCCCCACAGG CGT

SEQ ID NO:1712: (Length of Sequence = 202 Nucleotides)

TTTTGGTGGT TTCCTCTTAA TTGTGTGCTT CCTACCTTCC CCCACAATTT CAGTCCCTTC CAACACCCCA AAAAGAAGGA
GTGAAAGGAA GGGATTGCTG GGGTTCTGAG CCCTTGGCAG TCAGAAGGAC AGAACCAAAC ATCACTGGAT GTGACACAGC
TGCATCAAGA AGTCTACAGC AGTATGGGAA GCGGCAGAGA AG

SEQ ID NO:1713: (Length of Sequence = 253 Nucleotides)

TGATTCAATG GGTCTGGGAT AGAGTCTGGT ATTCTGCATT TCTGACTAGC CTCCAGGTGA TACTGATTCT CCTCATCTAG
GGACCTCGCT TTGAGTAGCA AGTGTTTAGG CCACTTACTA GCAGGAACATA AGCACAGTAT CCTACAACAG CAAATGTCTT
TCCAACAAGA AAGACGAGAG CAAATNCTGA TGCCACATCT GCACTGCCTC AGAAAATAAA GAAGGGATGA GGAGCCCCC
AGTGGCACTC TGT

SEQ ID NO:1714: (Length of Sequence = 299 Nucleotides)

GGTGCAGCTG CTTTGAAAAA TGAATTGGCA GCACCTCAAA ATGTTAAACA GAGTTACCAC ATGACCCAGT AATTTACAC
TTAAGGATAT ACTCAAGAGA AATGAAAACT AAAACATAC GGCTACCCAA AAACCTACAT AAGANTGTTT ACAGCAACAT
TATTCAATAT AACCAAAATA TGGNAACAAC CACAATGTCC ATCAATTGAT AAMIGGGTAA AGTCTGGCAA ACTCACAGRA
TGGRATATTA TTGGTGGTA AAAAGGAGTA AAGAACTSNAT ATGTACTACA ACATGGGTG

SEQ ID NO:1715: (Length of Sequence = 371 Nucleotides)

TTTTTTTTTAC CGGGCGGTTT CTGAGTTTAT TTGGGGCACA CCGGACGAG GGCCCTGCAC CTAGAAGAAG GTGTTGGGCC
TCTTGGTGGT GAAGCGTGGC TTGTGCTGAC GGCGCAGGAC CCGGTGGGGC AGCGGGAAC TGATCTTGGA GTCGTGGAAC
TGCTTGACAG CCGGCGGGCG GCACTTGCTG GCGCGATCT CCTCCACCTT CATGATCTGA ATGGAGTGGG CTCGGGCGCG

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TCCATCATCTG TAAAGTGGTT AAAGACTGAN TAAAGCAAAA TATGTGCAAA CAGTCTGTGA ATGGGGAAGT AACAGATGTT
GCTTTCTATT ATGTTCTCTC CTAGCCATGA ATATCAATTA TTTAGAAAT GAAAAGGGAT CCTGCACCCA ATTTCAAATC
AAGCAAGTTC ACCTAGAGG

SEQ ID NO:1704: (Length of Sequence = 372 Nucleotides)

GCTTCCCGAA GGTCTTGAC GAGCGCTCTA GCTCTGTGGG AAGGTTTGG GCTCTCTGGC TCGGATTTTG CAATTTCTCC
CTGGGACTG CCGTGGAGCC GCATCCACTG TGGATTATAA TTGCAACATG ACGCTGGAAG AGCTCGTGGC GTGCGACAAC
GCGGCGCAGA AGATGCAGAC GGTGACCGCC GCGGTGGAGG AGCTTTTGGT GCGCGCTCAG CGCCAGGNTC GCCTCACAGT
GGGGGTGTAC GAGTCGGCCA AGTTGATGAA TGTGGACCCA GACAGCGTGG TCCTCTGCCT CTGGCCATT AACGAGGAGG
AGGAGGATGA CATCGCCCTG CAAATCCACT TCAACGTTCA TCCAGTCTC TC

SEQ ID NO:1705: (Length of Sequence = 426 Nucleotides)

GATGCCTTAT TTAGTCCATT TGGTGAGGTA ATGTTTCTT GGATGTCCTT GATGCTTGTA GACATTTGTT GATACCTGGG
CATTAAGNG TTAGGTATTT ATTCAGTCT TCACAGTATA GGCTTGT TTAGCCATCCT TTTTGAGAGG ACTTTCCAAG
AATCAAAG GATTGAGTG TTGTGACCTA AGCCTATGTT CACTGCAGCC APTTCAGCAC TAGAGAGTGC CCTAAGCCCC
GGAATGCTGC AACTCTTACA GACTCCTTGA TACACAGCTT TGGTAGATT TGGGAAAATA AGGGAGAATT CCTTGGGGTT
ACCAGGTAAA AAGTCTCTCC CACTTCCCTC TCTTTCTGGC AAAGGAAGTC AGTCTCTGCA CCAGGCTGCC TGGAGTTTGG
GGGAGGGATA AGGCGGTAC TCTAAT

SEQ ID NO:1706: (Length of Sequence = 412 Nucleotides)

ATTTTATTTT CTACATCGA AGAAAATGTT AAAGAGTATC TNCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCTATCCC TCAGCATCT GGAATGGAG
TGGATGATCT GCAACAGATG ATCCAGGCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGTGGAAA GACCACTGCA
CTCAAACAGC TCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTTCTTTG CAGATGTAGT
TCCAGCAGTC AGGAAGTGGA GAGAGGCCCG AATNAAGGTG TACATCTATT CCTCAGGGAG TGTGAGGCA CAGAACTGT
TATCGGGCA TT

SEQ ID NO:1707: (Length of Sequence = 434 Nucleotides)

GTGTGTCTGC AAAAAAAAAA AAGATTCTAG GCATGGTGGT GTGTGACTG TAGTTCAGC TACTCCAGAG GCTGAGGTGG
GAGGATTGGT TGAGCCTGGG TGGATGAGGC TGCAGTGACC CATGATCATG CATGGGAGAC AGAGCAAGAC CTTGTCTCAA
GAAAGGAAAG AATCACTGG CTCTTCTGTA AAAAATGATC TGTTAAGAGT AATTGAAAA ATAAATACAA GTAATAAAT
AATCTTTTCA TTAAGAAATA CTACCAAAT TAACATGGAG ATCTAGCAA AAGTCAAAG CAGCTNGGCG TGGTGGCTCA
CACCIGTAAT CCTACACCT TGGGGAGGCT GAGGCGGGAG GNTCGCCTGA GGTGAGGAG TCGAGACCAG CCTGGCCAAC
AGAGCCAAGT CTCTACTTAA ATACAGATTA GCTT

SEQ ID NO:1708: (Length of Sequence = 440 Nucleotides)

GGACCAGGAC TCCAGCACCT TCCTGGCTG CATCAACAAT GCCACACTCT TTCAAGATGA GATAAACTGG CGCCTCAAGG
AGGGACTGGT GGAAGGCGAG GATTATGTG TGCTCCAGC AGGTGCTTGG CATTACCTGG TCAGCTGGTA TGGTCTAGAG
CATGGCCAGC CACCCATTGA ACGCAAGGTC ATAGAGCTGC CCAACATCCA GAAGGTGGA GTGTACCCAG TAGAACTGCT
GCTTGTCCGG CACAATGATT TGGGCAAATC TCACACTGTT CAGTTCAGCC ATACCGATT TATTGGCCTA GTATTGCGCA
CAGCTCGGGA GCGGTTTCTG GTGGAGCCCC AGGANGACAC TCGGCTTTGG GCCAAGAACT CAGAAGGCTC TTTGGATAGG
TTCGTATGAC ACACACATCA CGTTCTCGA TGCGGCCCTT

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GTACCCAGAG GCTTNGTGGG TGAGTATTC ACCTGCTTAC ACACCACTGA AGCCACAGCC AGCCAGTAAC TAAGGGGCAA
GAAAGAGCAT TGTCAGAGCT GGCTCTTTTG GGGGGTCCCC CATTTGGCCA CAAAGSCCTC ACCCCCCACC CCATCCCCGT
AACCAGAAAC CACCTTGA

SEQ ID NO:1698: (Length of Sequence = 376 Nucleotides)

ATTTTATG TTTATTACT TATTTTTCAC CTTTTTTCA AGAGATGGGG TCTCACAGTG TTGCCAGGC TGGACTTGAA
CTCCCACTCC TGGGCTCCAG CAGTCTCTCT GCTTCACCTT TCCAAGTAGC TGGGGCTATA AGTACACACC ACCATGCCCC
GCAATATTTT AATTCTGTA ATGTGTCAAT TAGCCAGTGA TTGTTGTATT ATAATAGAAT CACAGAAATG GAGGGACTCC
TAGAGGTAAT CAAATCTGGT GGTTTTAAAG CTTTTTATTC CCTCTAAAGG GATAGTAAAA CCATTAAAAA TATAATTTTT
CCCAATTATG TAAGCCAGRG AAAGCTGACC TYCTGGTTTA GAGAGGAACA CAGATG

SEQ ID NO:1699: (Length of Sequence = 365 Nucleotides)

GGTACATGTC CACAACGTNG GNGTTTGTGA CATATGTATA CATATGCCAT GTTAGTGTGC TGCACCCATT AACTGTTCAT
TTAGCATTAG GTATATCTCC TAATGCTATC CCTCTCCTT CCCCCTAGC CACAACAGTC CCTGGTGTGT GATGTTCCTC
TTCTGTGTC CATGTGTCT CATTAATCAA TCCCACTTA CGAGTGAGAA CATGCTGTGT TTGGTTTTTT GTCTTGCGA
TAGCCAGATG CAGCTACTCT TAATGTGCAT ATTTTCATCC TAGAACATG GAGAGTCTCT GTAAAAGCCT TGTGTCCAG
GAGGAAGGAG ATCTGACCC TTCTGTGAT GGCAGCAGTC AGGGG

SEQ ID NO:1700: (Length of Sequence = 397 Nucleotides)

AAAGGCAGTC AAGCAGGAGT TAAACAATAT GGACCTAAT CTCTTATAT GAGAACATTA TTAATTTCCA TGTCTATGG
AAATAGACTT ATTTCTTATG ATTGGGAAAT TCTGGCTAAA TCTTCCCTTT CACCTCTCA GTATCTCCAG TTTAAACCT
GGTGGATTGA TGGGGTACAA GAACAGGTAC GAAAAATCA GGCTACTAAT CCTGTGCTT ATATAGATGA AGACCAATTG
CTAGGAAGAG GTCCAAACTG GGACACTATT AACCAACAAT CAGTAATGAA AATGAGGCTA TTGAACAACT ATAAGACTA
TTTGCTCAG GGGCCTGGGA AAACATTCAG GACCCAGGA ACCTCATGCC CTCTTTTAG GTTCAATCAG ACAAGT

SEQ ID NO:1701: (Length of Sequence = 245 Nucleotides)

GTCTAGGAGG AGGCCTCTG CACAGAGCCC CTGAAGAACA CAGGCAGAGG CCCCCACTT GGCTTCTACC AGTCCAA
CATGCACTG GAGGTGACCA AGTCTTCAT TGAGTACATC AAGAGCCAGC CCATTGTTTT CNAGGTCTTT GGCCACTACC
AGCAGACCC GTTCCGNCCT CTCTGCAAGG AGTGCTCAG CCCCCINAGG CCTGCGGCC GTCACTTCCC TGGGGTCATG
CCACT

SEQ ID NO:1702: (Length of Sequence = 349 Nucleotides)

ATCTGTGTC AGCAGATTT TATTGCTGT GGAATCCATG AGAGCCGGAA GCATGTTGG GGCCGTGGCT AGCAGAGCTC
ATGGTGACCA GTCCCTGGCC TGACCAATGG GTGATTACAT TTAATAACCA AAACAAACA AAACAAATA CCAAGAACAG
ATCACTTGCC ATGGACATCA GTAATCTATT GGTAAATGGT AAAATTTTAT GAAATTTTCC CCTAAACCAT AACAAAACT
GTCTCTCTTA CCCCAGAGT GCTGGAGGGA AAGATGGTTG CATGGCTTTG ACCTCTCTTT GAACCTTGAA TGCTACCTTC
CTACCCGGAA AATGCGGCAC ACTATACTT

SEQ ID NO:1703: (Length of Sequence = 419 Nucleotides)

GAGCCCTGC CCTCCAGAAG CTCACATCCT CTTACTCATG GCAGACAAAT AAACGTGAAT TACACTGCAG GGAGGTAAGT
GTGGCAGCAG ATGTAGTATG CAGTGACAGG GTGGCCATGG TTGCTAGGGC AAGGAGGGCT TCCTAGCATG GGCGTTATTT
GACCAGAGGC TGGCGGTGGC TTTTGTAGC AGTGTGATTG TNACTGAGC CAGGACAGA TACCTCTNG AGCCTTGGTT

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CTTAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TTTGTATCGG
TTTTATAATT CTCATGTCIT GATCAGATCT GAAGGGAATA GGCATACCTT CC

SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TTTTTTTGGC AAAAATAGTA TATATTTATT ATGTACAACA TGTATTTTGA GATATGTATA CATTGTGGAA TGTCTAAATT
GAGCTAACAA ATACATTATC TCACATACCA TGTFTTTTGG TGGTGACAAC ATTCAACAAT ATAGACCATT TCACAAATTT
GCATGTTATC TTTGTGCAGG GGTATGCCA ATCTTCTCTG TATTTTINCA ATCTTGGTGT ATGTGCTGCT GAAGCACACA
CCCTAATTCC TTTCATTAA GGNCTAGTT AACCTTCTC TTAAGTATAA CCATGTATTT TGTTAAGCAA TATCTTTTTA
TTACAAAAT GCCATTTTTT TCTGGNTAGG AAAATTGATT

SEQ ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGTCTGGC TGCCGATGTG GAAATTTGTT TGTGGACIT CACCGTACT CTGACAAGCA CAACTGTCCG
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGT TGTGTGGCT GAAAAAATTC AGAGAATATA
AATTACTTCT TGTGAAGAGA CTGAACTTT GTTTTTATTT TAATATATCG TAGGAAAACA TTAAAGAGCA GATGCATGGC
CATTTTNCCT TGATGTTCTC CAGAGTTTTA CATTACACTT GTCTGTCTTA TAATTGATAT TTTAGGGATG TTTGGGTGTT
TGTTACAGGC AGAATTGGAT AGATACAGCC CTACAAATGT ATATGCCCTC CCCTGAAA

SEQ ID NO:1694: (Length of Sequence = 362 Nucleotides)

AATGCACTTT ATGGGCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC
NCCGGCCCTG CCCCAGACCC TGGTTCCCT GAGGACCAAC GTGAATGGG GCCCCACTGG AAAGATGCTT GGGGCTGCAG
AGCGGATGGA ATGCAGGCCC AGGTGCTGG GTGGTGCCCT CAGCTCCTGG CAGGGTTGAC GGGTGGTGGC CGCTGGGCTC
TGCCAGCCGA TGGTCCNCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCCTGCT CGTAGTTGTC AGTGAACCAA
GCACAGGTCT CTTTGACCGN CTGCTTTNAA GGGTGTGAAN CG

SEQ ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GGGTTTGAAC TGGACATCCT AATGATGCAA TTACGTATC ACCCAGCTGA TTCCGGGTGG TTGGCAAAC
CATCGTGTCT GTCTGTAGAG GCTCCACAAT GCCCACCGC ATCGCCATTC TGTAGTCTTC AGGGTCAGCT GTTGATAAG
GGCAGGCTT GCGTTATGG CCTAGATTTT GCTGCAGATT AAATCCTTGG AGGATCTCT TCTCTTTTAC CATTTTNCCT
CGTGTCTCA CTCTCTCTT CTCTCTCTAG CTTTTTAATT CATGAATATT TTCGTGTCTG TCTCTCTCTC TCTCTGTGTT
TCCTCCAGCC CTGTCTCTCG AGACGGTGT TTCTCCCTT GCCCATTATC TTTTCAACTC CCAGGGCTAC CCATTTCAAT
GGTGGGTCTG T

SEQ ID NO:1696: (Length of Sequence = 280 Nucleotides)

CTTTGTGATG TTTTACGCT TTACAAAAG CAGATTGGT ATTCAGAAA GCCTGCAAAT ACAACATTGC TTAAGAGAAC
CTGTAAACAC GTTTGGAATA CAATGCAACA CAAGTCAGCA AGGACAGGG TAGGTCCAAA GGAGCCAGCT AGGGGAAAG
GTGACAGAAA AGGAGAGGGA AGGATGGNGA CAGACATCAC CTGTGGTCTC TAAGGGGGCC NIGTGTITAA TTTATAAGGT
TTNCTNCCCA CAGGAGTTCT NNTGTGATCT ATCGTTCAT

SEQ ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTTCTTCAT TTACAAGAG AATATATTTG GCTTCTCTCT TAAGACTCTG AGATTACAA TCAGCAGCTC TAAAAAATAA
AGGAGCAGTT TGGCTTCCG AAGGAAGAGG AGGCAACACT CGGACCTGGT TCTTGTACAA CAAGAAAACA TCGCTGGGGC
CCCGCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTGGA GGATGCCACC CCCACCCCAT CCTCTGTCA GGCCCTCGGG

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TGAGAGAATA AATGGGTAAT GGGAGGAGAA CTATTTTAAC AAGGGTCCTG GGTTCCTCTT TGCAAACACA GTAGGCTTAA
ACTTTGCCCTG CTTTTTAAAA TGGCATTIT

SEQ ID NO:1686: (Length of Sequence = 445 Nucleotides)

TGTCITCATA ATATAACAAC ACTAATACAC TAATAGTAAG ATTAAGITAG GCAGTCTTCT ACCAAATGTG TAATGGAGAT
TGCCCTCAAAA TTGTGTCCAC ATAATCCACG CTCATCTTGC AAAGCGCTAT TTCAGGCACT TTTTTTTGAG AAAGAGTCTC
ATTCTGTGCG CCAGGCTGGA GTGCAGTGGC GCAATCTTGG CTCACAGTAA CCTCTGCCTC CCGGGTTCAA GOGATTCCCC
CGCCTCAGCC TCCCGACTAG CTGGGACCAC AGGCACGNAC CACCACGNCC GGCTCACCTT TGTATTTTTTA AGTAGAGATG
GGGGCCTCAC CATATTGGGT CAGGCTGGGT CTTCAATCTN CCTGGACCTC ATGNTCCACC CGCCTTGGGC CTNCCAAAAG
TGCTTGGGGA TTANAGGGAA TNGGGCCACC GGGGCTTGGG CCAAT

SEQ ID NO:1687: (Length of Sequence = 170 Nucleotides)

AAAAACCAAA TAAAGCAATA ACTTTAAAGA CCTCAGACAC ACACAGTATA AACACCTGGG TAAGGTTTTN TCCGTGTCCA
TGTTGACACC GGAAGTACCG TTAAAGTGCA AGTTTTGTTT TGTGTTCCTT TGTGCAGTTT CACTCACATG TAAACAAGTC
ACTTGGCTAT

SEQ ID NO:1688: (Length of Sequence = 386 Nucleotides)

AATGTGATTT GATGTTAACA CTAGAGAATG ATGACTGTAG AACATTTGAG CAAGTAAAAT AGTAAAGCAC ATAGTGAGTG
TATGTCCATC TAACTGGTAC ATTGATAATT TAGTTTGGGC ACATAAAAGG AATATTTATA TGGCTTCCCA AATGCAGAGT
TACATCTTAT TCGTGTATTT CTCAGAGTAT TTATATCCCG TCTCCTTTTT TCATTCTTAA AAATAAATGA ATTTTCACTG
TTGGCACATA TGAGGCTTAA ATATAAGGAG CATAACACTT GCATCTAAT TTTTGCAIAT ATTGTAAATG TGTCTGGIAT
TTACAGCAAA ATACTGTGTA TCCTTTATGG GTAAACAAAG TGACATTGCA TGCATGTAAT GTGATG

SEQ ID NO:1689: (Length of Sequence = 400 Nucleotides)

CTCTGTGCG ATCAGCGTAT TCCTAGATTA GGAATTCAAA TTAATGAAAA TTCACATATG AAAGGAAAAT CCATTGCTAT
TTCGTGAGAG GACCTCAGTC CTGGGCTTTT CCCTGGCATT GCTACCTGGG TGGGTGCTCA CCACTCAGGT GCTGGTGTG
GAAGGCAGGA GGAGGAACCT GAAATCCTGC CGATTAAAGC TAATTAACAG GGTTTAGGTG CCTAATTATC ATGACTCAGC
CCGGGACTTA TGGTTAGCG TGCAGGCCAG GTGAGTCTCT TATGGACTTC CTCTCAGACT GCCTTTCTC ATTTTGTCTT
GATGAGATAT TGACAGTCAT GTCCACCGC TTCTCATCC ATTTCCCGTC TTTGGGCCCT GGGGAAGTACG GGGGCCCTCTG

SEQ ID NO:1690: (Length of Sequence = 337 Nucleotides)

AGINATATAC CTTTAAAAGT AACTAATGCA ACTGCCAAAN AGGGACAGTG TCAATATCAT TGINTTCATT AGAAGGACGG
CTGCCCCACA CTGINAGAAC ACTGCTGTTC CTAACAGTAG TTTACTTTNA GAGGGATGTA AGAATTAGTT TNACCTTAAT
TCCAGATGTG CATGCCTCAA AAGAAAAATC CCATTCTCCT TCCTTTTGGG GAGCATTIT GGTGGCACCA AGGCTGGTGT
GGGGTAGTGG AGAGAGCACT GAGCTTAGAG TCACAACCAG ATGAAACTGC TCTGGTCTTC ACTAGCTGTG TGAATTGGGC
AAGCAGCTTG CAGTCTC

SEQ ID NO:1691: (Length of Sequence = 372 Nucleotides)

TCATTTCTCC AAAGTGCTGG GATTATAGGC GTGAGCACGT GCGCCAGCC TTACTTATTT TTAAATCAGA TTTTTAATC
AACTAAAACA GCTATGAGTT AAGTACCTGC CCTGCAAAA TTTTATAGAA AAGTTTTAGG ATTATGAAAT TAAGAATTAT
TTTCTTAAC TGAACAGTT CTAATAATTA TCTGATACTT CTCTAACAAG TGAGTGATCT CATGTAACCC CAGTTTGTAT

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SEQ ID NO:1680: (Length of Sequence = 438 Nucleotides)

TACCAGTAGT TCCTTTCCCG CTCTATTTT TAGCTGCTTT TTGGGTTTTA TACAATGAAC ATGTATTAT TGTAGAAGAA
 AACGATGTCA TCCTTTATGA TAAATCCAT TTCCATTTTA GCTTTTTTAA AAAACAAAA AGCTGTTGTG GACAGATGAA
 CATCCAAGTA CTGGGCACAC CTCCAGCCCT CCCTCTTCCA CTGAAGGCCA TTGCCTATTC CTAGAAAGTT CTTTCCAGG
 TATGCAGCTT TCAGTTTCCA CTTCAGAGGC CACAGTGTCT GGGGGAACGG ACTGCCCCCA ATACTAAAGG GAGTCAAAAT
 CTCTTTAATT NCCGCACTTC CTCAGTACCA ACAAGGAAGT CCCTTCTTTA GGGCCACTGG ATGGGAACCT NGGGACCCCC
 CTTTTTGAT TGGCAAGCAT TGGGGTCTCT AGGGCCTT

SEQ ID NO:1681: (Length of Sequence = 370 Nucleotides)

GTCTGGGAAG GGTACAATGT CGTCCGCGCC TCGAGGGCCA TGATTGGACA CACCGACTCG GCTGAGGCTG CCCCAGGAAC
 CATAAGGGGT GACTTCAGCG TCCACATCAG CAGGAATGTC ATCCACGCCA GCNACTCCGT GGAGGGGGCC CAGCGGGAGA
 TCCAGCTGTG GTTCCAGAGC AGTGAGCTGG TGAGCTGGGC AGACGGGGC CAGCACAGCA GCATCCACCC AGCCTGAGGC
 TCAAGCTGCC CTTACCACCC CATCCCCAC GCAGGACCAA CTACCTCCGT NAGCAAGAAC CCAAGCCAC ATTNCAAAAC
 TTGCTTGTC CAAACCACTT ACTTCCCTGT TNACTTTTG CCCCANCCCA

SEQ ID NO:1682: (Length of Sequence = 397 Nucleotides)

ATGTAATCCG CTGCACAAA CACACCTTCA CCAACCACAT GGTTTTTAAG TTTGACTGCA CAAACACACT CAATGACCAG
 ACCTTGGAGA ATGTACAGT GCAGATGGAG CCCACTGAGG CCTATNAGGT GCTCTGTAC GTGCCTGCCC GGAGCCTGCC
 CTACAACCAG CCCGGGACCT GCTACACACT GGTGGCACTG CCCAAGAAG ACCCCACAGC TGTGGCCTGC ACATTGAGCT
 GCATGATGAA GTTCACTGTC AAGGACTGTG ATCCACCAC TGGGGAGACT GATGACGGAG GCTATGAGGA TGAGTATGTC
 CTGGGAAGAT CTTGGAAGTT TACTGTAGC TTGTTACAT TCCAAAAGT TCATGGAAAC TGAACITCGA GCAGCCT

SEQ ID NO:1683: (Length of Sequence = 396 Nucleotides)

GGCTGCGCAG AGGAGCCGCT CTGCGCGCCG CCACCTGGCC TGGGAGCCCA CGAGGCTGOC GCATCCTGCC CTCGGAACAA
 TGGGACTCGG CGCGGAGGT GCTTGGGCGG CGCTGCTCCT GGGGACGCTG CAGGTGCTAG CGCTGCTGGG GGCGGCCAT
 GAAAGCGCAN CATGGCGGCA TCTGCAACA TAGAGAATTC TGGGCTTCCA CACAACCTCA GTGCTAATC AACAGAGACT
 CTCCAACATG TGCCTTCTGA CCATACAAAT GAAACTTCCA ACAGTACTNT NAAACCACCA ACTTCANGTT GCCTCAGACT
 CCAAGTNATA CAAACGGTCA CCACCATGNN AAACCTTACA AGCGGGCATT TTAATTNCA ACANCAACCA GGGGAT

SEQ ID NO:1684: (Length of Sequence = 417 Nucleotides)

ATCCAGGGGA GATGCATGTG GAAATGTGGT CCTCTGGGGT CAGACCCCTG CACGGGACAT CTTGCCITTN AGTGTGCAGA
 GTACATGGGG AAGGGGCTGG GGGCACCCT GTGTACCTGG GCCCAGTAAG GCATTTGCCG TGATTCCCAC AACGGGGTCA
 AAAGCTGGCC TTCAGGGTGA CCTAACACCA CCTCATGCCC TGCTATAGAC CTTACAAAC GACTTCCACT GCTGAAGCCT
 GTAGGCTCTG TTTAGAGACA AGAAGATGGC TGGTAATTTA AGCACCGATT TCCCAAGTGC CCACTCTCCT TTGTGCTCTG
 TTGGCTTTTG GCCTAAAGCT TNNCCAGAG TTAGGGTGTA GGATGTCTGT GGTCTGTGAG ATGCCCTTCC CTTCCCCCT
 CTGCTTCAAC CGTGGTT

SEQ ID NO:1685: (Length of Sequence = 429 Nucleotides)

GAGCCATGGA GAACTCTGAA AGGAAGAATC GCTGCTTTC TCAAGCAAAT CGGTTTCTTG ATGTCCTTTG GTTCTCCTTG
 CCTGCNCTG ATGCTTGNC CCCTTAATT GATCAGAGTG CTCTAGAATA ATGGATGGTC TTGGATGATG GATAAATAGG
 GACAGGGACA GTTAAATGG GAGCCTTCT TACAACCTTN ATGGGATTTT CCCCCCAAG TTTCCTTCTC CACTGAAATG
 CCACACTAAT GCTTGTGGG ATTCATGAGG TGGCCAGACC AATGTGTGT TTGTTGTG TTTTTTTTTT AAGCTTCCCT

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CTGAAATTTG GCAAGAAGGG GCAAAAACGT GACTATTAAT GATTGATAAG CACCAGTGAA GAAGTTCTAA CTTTTCAGCAT
 GCTGCACAGA AACTGGTATA ACATGCCCTC AGTATACTAA CACTCATATG CTCAGTTTGG TTTTGTTTTG GCAGTTGACA
 AGAAGTTAAT TTGCTTTAGT AAAAATCCCT CATTCAGCC TTTCTATATA AATAGCTCTT TCTTGCTGTT TTAATGTGGT
 GCACACTATA GCCTCACAAA CCTGTTATTC CAGTGTAATC TGCAGTGTG TAACTAAAGT TACTGGCTTG GGTCTTATTT
 GCACAGTTTT TGCNCITGT TTGCTTCTTG CATCTGGATT AACTAGGAAT ATTTCTC

SEQ ID NO:1675: (Length of Sequence = 381 Nucleotides)

CAGAAGTCAA TCAGCTACGC ACCCAGTTCT CAAAGACCTC ACATGCTAGG GAAGGTGCGG AGGCAGAGTT GTGGTTCAGA
 AGCAGTTACA GGTCTCAAAG CAAGAACAGC AGCCAAAGCT TCCAGCCCT GACGCTGCCT CTGAATGGTA AACCAATGGC
 ATATGGTATC CACAGCTAGG CTTTGCTTTT TTCTGAGTGA AGGTAAAGG CATTTGAAAA TAAACCAAAG TTTCACAGAC
 TATGTTTTAT GAACAAACAT GGGCCATTTT CAGGGATATA AAAGTCGATG TTCTATGTAG GCCCCATAT GAGTATTTAT
 CTACTTTTTA TTTACTTTAT TTTATGGAAT TTTTGTGCA AGGGGCTTCA CTCGTTCGG A

SEQ ID NO:1675: (Length of Sequence = 404 Nucleotides)

CTGTGTGAT TGCTTGAGCC CATCACAGTT TAGCTCTCAC AGCTTTAATT TACTAGCCCA TGAGAAGTCA GCTTCAAAGA
 ACACCATTTC GACTCTCAA GAACATTATC AATGTACATG GATAGCTTCC AACTTCATAA GGTGTTTCTC TCTACCTAGA
 GCAATTAACA TTAATTTGCA GAATAGTGT TATTGAAAAC CTTTGTTGAT CTCACACAA GTAATAGTGT ATTGATTTCA
 TTCTACTAT CTTCAACTGT ATCATTAGA GGAATTTCTT AGGNAAGTCT ATATGCAGTA AGCAAGTAAG ATCGCAGAAC
 ATCAAAGGGN GGAAGTAAAT CCCAAACTG GNTTTTACCT TCCTTCCCT TAGGTGAGGG AAAGGAATTT ATGGTTTAA
 AGCT

SEQ ID NO:1677: (Length of Sequence = 388 Nucleotides)

ATGGACAAC ATGAGCCAGG AGTCTACACA GAGAAGGTTT TGGAAGCCAC TAAGCTGCTC TCCAACACAG TCATGCCACG
 TTTTACTGAG CAAGTAGAAG CAGCCGTGGA AGCCCTCAGC TCGGACCTG CCCAGCCCAT GGATGAGAAT GAGTTTATCG
 ATGCTTCCC CTGCTTATAT GATGGCATCC GGGACATCAG GAAAGCAGTG CTGATGATAA GGACCCCTGA GGAGTTNGAT
 GACTCTGACT TTGAGACAGA AGATTTTGAT GTCAGAAGCA GGACGAGCGT CCAGACAGAA GACGATCAAC TGATAGCTGG
 CCCAGAGTTG CCCCAGGCGA TCATGGCTCA AGCTTCCCA GGGAGCAAA AAGCCGGAAG ATTTTCGG

SEQ ID NO:1678: (Length of Sequence = 428 Nucleotides)

TAACTGTGCA AATAATCCAT GAATATATTG TTTTATACA GCATTACAGA TAAGGCTTGC AGCTCTATAG ATCACCCTCA
 TCCACTCCTT CACTCCATTG CTACACTTAA AAGCCTCACA TGCTCTCTG TCCTCTCCAA AGGCAGCTGC TAGCATCAGC
 GCCCACAGTA GCTTCTTTT GTTTCCTGTT TATAAACCAT ACATTTTCTA TGGCTACACA TACGTGATT GTTTGATGCT
 TTCTAATAAA ATGTATCAT AGTGGTACAC ATCTTTCACA CTTCCTINAT TACAGTCAAC ATTGNGGA ATACAGAATG
 CAGCAGATCA AGGANTTTT CTCAGTCTTT TCTAACATGN CCCCAAATAC AGCCTCACTA TGGGGTCCAT TTAGNGGCT
 CATTGGTTTT CACTCTACA ACGGTGGC

SEQ ID NO:1679: (Length of Sequence = 256 Nucleotides)

GGTGTCCACA GCTGCTGCC TGGCCTGGAG CAAATACCTT TGTTAAGTGC TCAGAGGGTA TGGCCCTCA AATCCACCT
 GCAGCTCCCT GGTGCAAAAT ACATCTACTC CATCTTTTCA ACTCGCTCC TGGACCCCTG GTTAACACTT CACTGTAACT
 CCTCAGTTGT ACAAGCAIT TTCAATTGAA TACAAAAGGC AACTNGNCAC CANATGGGCA TCCTTGAGCC ATGGTAAACA
 CTGAATTNA GGCTCA

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GGCTGGAGCC TGGCCCTTTN CTCCATGCTC TTGNTCCCT TGGTCATCGT CATCOGGCCT CTGCCAGACT GAGGGGGCCG
TTCCTTTGTG AGAGTCAAGT ACCTGCTGAC CCCAAGGGAA CCCAACC

SEQ ID NO:1668: (Length of Sequence = 300 Nucleotides)

CCAGACAAAT ACCAAGTTTA TTTCACAAAC ACTAGGAAGA TGGGTTGAGG GTGGAGGTGG GGGACACAGG TGCGCANTGC
ACAGAGTCAG CAGCAGCAGC CTGNTCCCG CACTGAGGAC TCGGCTTGA CTGCAGTGCC TCCAAATCAA CACGCAGCAA
GAGGGGAGTN CAGNGAGGGC CCINAACACC AAGCCTCTGA AAGGCTAAGG GACACAGCTC CATCTGTCCC AGGAAAACCA
GCAATAAATA AAAGTNNGGC ACGGCCCCAC CCACACATAT CATCTAGTCA CCCATCTTCA

SEQ ID NO:1669: (Length of Sequence = 334 Nucleotides)

TTTTAATGAC AGATTTTCCT AAAAGAAACC ACTATAACAT CTGTCCAAGT ACTCCAGAGA AAACAAAAA TACATAAAGA
TTAAAGTCT ATTACTTTAA CAGCACATTG CCAACACGG ACAACTAGGA TAAATGCCAA GAAACCTTAA AAAATAACTT
TAAAGATGC AACGTTCAG CCATTCAAAC CGGTAGGTTT CACAAACAAC AGGNNACAA GTCCAAGAGC AGTTCTACTT
GTGCATGATG GTAACTCAGA CTGTACTTCA TCAAAGTTCA TTCAGGTGTT TCATAGGCGT CTGAGCAGAG TTTTGTTTTT
TTCTTTTCCTT GCTT

SEQ ID NO:1670: (Length of Sequence = 287 Nucleotides)

GATAAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATTNITGGGC AACTTGACAG CAGAACAGGG
TAAANITGAG TTAGCTACAA AGGCTCATCA GAAATGGCA ATAGATTCCA GAGAGATTTA ATAACACTT ACAAACTCTG
CTATAGGTGA CAAATCTGAC CATGATAAAA GCACCGTAAA TGATATAGGT AACACTGNGC ATATGAAAAC TCAGACTGTG
CACTAGATAA AAAGGAANCC CAGCATACAG TGTIACCACA TGTAAAT

SEQ ID NO:1671: (Length of Sequence = 187 Nucleotides)

GATAAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATTTKGGGC AACTTGACAG CAGAACAGGG
TAAAWITRAG TTAGCTACAA AGGCTCATCA GAAATSGCA ATAGATTCCA GAGAGATTTA ATAACACTT ACAAACTCTG
CTATAGGGTG GACAAATCTG GCCCATG

SEQ ID NO:1672: (Length of Sequence = 329 Nucleotides)

ACATCACAAC ATCGTTTATT ATGTGAATTT TTTACAATAC AAACAAAAA TACAGAAATG CAATATATGA ATACAGCTAA
ATGCAGAATG GTGACTTTTT TCTCTCAAG AGGCCATGAT TCCCATTTCT AGTAAATAA AGAGACTGCA TATAGGTAGA
AACAGGTTGG TCATTAGCTT CACAATTTTG CCTAGAAATG ATCTATAAAT GCATTTCGCC CCTGCTACT TACCCTAAAG
TGIAAAAGG GAGTTAAAGG AAAGTTTCCT TGTGTTTCC TACCATATGA AAGATGCTAT ATTCTATTTT AGCAGTGCCA
ATATATGGG

SEQ ID NO:1673: (Length of Sequence = 386 Nucleotides)

CTCCCTACTG TGATTCTCAT CAAGCTGGAA GCGINGTGAG AAAGCACTTC AGTTTCTTCC CTCGGATATG AACCTGAGCT
CTCTGATGAG GTGGTTTGA AGTGGCCCTG GGAGAAGCCC ACTTCTTGGT CACAAGATAC TGCAITCTCC TGGCAGATGA
ACCAGCTGCT TCCAGCATCC TCTGTGTGGG TCCTCACGCC TAGCTGCTCT ACGTGTGGC TGCACAGTGG CATCACATGG
GGAAAGTAGAA AAACCTCTGA TGCTGTCCC CACCGGCTT AATCACAGTG AAGTCAGATT ATCTGGGCT GGGACCTTAC
CATCATTTT TTAAAGAAT TGCAGGGGCC AGGGGTGGC GGGCTTCAGA GCTTCTTAGC AATTTT

SEQ ID NO:1674: (Length of Sequence = 377 Nucleotides)

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SEQ ID NO:1661: (Length of Sequence = 294 Nucleotides)

AGCACCTCCC CTGAGGGCCA GGCCITGGAG AACCGGATGA AGCAGCTCTC CCTACAGTGC TCAAAGGGAA GAGATGGAAT
 TATTGCTGAC ATAAAAATGG TGCAGATTGG CTGATTCATC CTGGGOCCTG GCGGATATGC ATATCAACAT TTATACATGG
 AACTGTGAGA ACATTKTGCC AATAATCATT TAATATATGC CAAATCTTAC ACGKCTACTC TAAACTGCTC TAATGAAGTT
 TCAGTGACCT TGAGGGCTAA AGATINTTCT TCTGGTGTA GAGCTCTTTG GGCT

SEQ ID NO:1662: (Length of Sequence = 291 Nucleotides)

GATTTTCATC AGGCAAATNA AAGTAACCAC AGAAACAATT CAGTAATACT ACTAAGAGAG ATTAACCTCC CACTGGCCTT
 GGAATAGCTA AGTGCAITGA TTTTKGTGTA GTTGIGAGTT TTTTCTYTC ATTGATATTT TAOGTATTKC TGGGGTAAAT
 GTATTTTWA CATGCATTGA ATGTGTAATG ATCAAGTCAG GGTATTTGGG GCGTCCATCA CCTGAGTGT TTATCATTTC
 TATGTGTGGT AACATTCCAA GCGCTCTCTT CTAGCTTTGG AATATATAGT G

SEQ ID NO:1663: (Length of Sequence = 345 Nucleotides)

GGCAGTGGGA CTCCTGTGG ATAGACTGAT TCTTGTTAG AAACAACAGC AAAAGAAGA AGGCAGGAAA GAAACTCCCC
 GGCTGGAGG AATGTCTCTG TGATCCCAT TCTTGATGGA GGGAGTAAA AGGGGCTGG NCTTCGCOG CTGCTCTCT
 GACAGAAACA GTAAGTINACA CCAGGACAGA AGGCAGGAGC CCTGAGAACT CACGGCGCTC TGCGTGTCT CCAGCCNNC
 ACCCGTCTCC AGCCACCCCT GGAGCGGCG TGGGGAGCG GCAGAGGGG CTTTTCGGAG GGCCACTAT TNCACACGT
 CTTCTTTNG ACACCCAGAA AACTT

SEQ ID NO:1664: (Length of Sequence = 334 Nucleotides)

GTAAATAAGA AAGTGAATA ATTCCATATA TGTAAGGTTG ATAGAAGATA ATCATCAGGG TCAGAATTAA GAGGTCTTGT
 GGTTTAGGAA GCATAAAAT ATGTAACTTA TTGTTTATTT CACTCAGAAA ATAAAGTAT TAATGAAAG AGTTAGAGAT
 GAACAGATTG ATACAACTG TTCTATGGT TACAGCTTA AAAATAAAGG TACATTTAAT GCTATGCATT TTGAGAATAA
 TGCTTTTAT GCTNTCCCT TTTACATATG TATCTNTTG TATTTAAGGT CAAAATAGAT TGACATTACT AATTACTTCA
 CTATTAATAA TTAA

SEQ ID NO:1665: (Length of Sequence = 310 Nucleotides)

TGTACINCTA TGAAGCATCC CTCCACATC AGATCAAAGA CATCTTAAAG CCAGAAATAA TGGAGGAGAT TGTGATGGAA
 ACACGCCAGA GGCTTTTGA ACAGGAGGGA TAAGGAGGTG CTCCAGAAGC ACGGGACTNT GGACCTTGCA GGAGTGAAGA
 CTGTRATGIG TGGTCCCAT ATGTGGCTCA GCAAAGACTC GAGAGATCAT CCTTTGTCT GCATGACGG CCTGTGACG
 GCGTCCAGCC CACAGGCCCTG CTTTCTCTG TCCTAACACC AAGCCTGGGT GGCAGATGAA CAGTCTTCC

SEQ ID NO:1666: (Length of Sequence = 352 Nucleotides)

TTTTTTTTTA CATACAAAGT TTGGATTTTT ATGAAATCT TGTAGGTAT CAAACAAAT CTGCTTCTT CAGATAAAAA
 TATTCTCTCA GATGCTCCA GATACTGCT AAGTCTAAT TGGTCTTCA ATGCTTAT TTTATGTCC TCGTGAAATG
 TTCAATATACA GTTAAGATGT TCCAAAAGG ATTTTATCG GTTAAAGGAG CGTACATGAC GACCTCTACC ACTGCCTCCA
 CTAAACAACT TTCTCTTGA GCGTCCACTG CGCTATTG CACTAGCCA GGAAGGTCC AAGTCCCCCA CGACCTTAG
 AAGCAGGTT CCGAGGACT TTGGCGTAA CC

SEQ ID NO:1667: (Length of Sequence = 287 Nucleotides)

GACAATNATG CCGCTGCCA CATTTGGTC CATCTTTT TTTATTATGC TTCTTNTCT TGGACTGGAT AGCCAGGGAT
 GTTTCANCT CCGCTGCTC AAGTACGTAC CCTGACCTA CAACAAACA TACGINTACC CCAACTGGGC CATTTGGGCTG

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AATCATCTGG GGCACCTCTA CCTGTCCAG CTCCTCCAG GGATGTTTTG GTGCCGCTCA GCTCCTGCCC GTGTCATTGT
GGGTCTCTC AGAGTCCCCA TCGATTACA GG

SEQ ID NO:1655: (Length of Sequence = 325 Nucleotides)

AGGGTAAAT GTGAGACTGT TTGTATATAT TTTTGTGTTA TATGTTTTTG TTGTTGTTAT GTTGTATNT TTATTTATAA
AATGATAGAT CTGTGGGTAG GTTCTGAGAA ATGAATAGCT TGTATTCTCT TTTTATGAA AGAAGAACAA AATGAAGTTC
AAGTGGAAAG TATCTCCAGA AAGTTTAACA TTTTCTTATT AACCAACTCA TTGATTGGCA TGTGAAACTT GAGATATTTT
ATATAGCACT TTTTAAATGA GGATCTAGCT TCACTINTATC ATACAACCAC ATTTAAATA GCCAGGTCCA TGGTCATTAT
AGGGG

SEQ ID NO:1656: (Length of Sequence = 285 Nucleotides)

GAGGNTTAAT AGAATAGATC AAAGCAGAAT GCAGTGTGTT CATGTCATAG GTTGACTTCT CCAGGAAACC GACCCCAAGT
GGAAGGTTTA CATGCAGGTG GTTATATTAGA GAGTGATGTT GGAAGAACA CCTGTAAGCN AAGAAGGGAG CCTGGGAAGA
GCAGNGGAG AAGGTGAAC CTGATTCACT TGCAACAGAG TCCTAGGCTG AGTGCATGGG ATNCTGTAGA GTTGGGGATG
GACCTTCAGA GATATTCCAA ATAGAGAAAG AATTCTGT TACTC

SEQ ID NO:1657: (Length of Sequence = 385 Nucleotides)

GACTTGACTT TGCNTTTTC CCCCCAAGTA GAACATAATGC TAGCTTCCAG CTTGAAAGTA AAACCTCCAGT GTGGAGTGAA
TTTTGTGTCT AATTATAAAC CTGTAACCA AACTCAGACA TCTGGTACTG GTCTTTGCAT TGAGATTGGT CCTGTAAAA
CCCCCTTTAA AAGCATATTG CATTAGTAC AGAGCTCTTT TTGAAATGN AGGCTGGAGA TGTGCATTTT TCAGGTGTT
AACTGGTGT ATCTATTAG CAAGGAGATT GGGGGTTTTG AGTGTGCG TGGGTGGGT TCAAAATTCG CAGGGGAACC
AGTGGCAGG CTGCTAGCAA GGCAGTGAGG AAGCTCTGG CAGCCAAATG GGTGCATTT CAGGG

SEQ ID NO:1658: (Length of Sequence = 338 Nucleotides)

GATCAGGACC TCTTCTCTCT CCAACACTG CCAAGAGC CCGTTGTAA ACGTTTACCA GCACACTACT GGGCTGTTTC
TCTACCACTT GATTGAAATG ATCCTTATGG AAGCACAAT GACTTCACTG TCACTAAATC CAAGGGACAA TTTTATGCT
CTATTTTCT TCAACTCTCC AGGATGTTG AGAGCTGATC TTTCCCTCCC TCTTGAGCCT CCTCTCTGC CTGCTTTTA
GGGGTCTCTG CTGACTTTTC TTCATTCTA AACACATG TN CAGGGGGT CCTCAGCCCT GCAAGGCCNA TGCCTGGGT
ACCCAGTCTT GTGGCCT

SEQ ID NO:1659: (Length of Sequence = 346 Nucleotides)

AGTATGTGAA GTCAATCACT TTTTATATGC AGATAATATG CGACTTATAA TGGAAGGTCA CGTTTCAATA GCAACAAAA
AAGCTATAAG TAACAAAGAA TAACAAACT ATAAATGAT AGGCTCTACA TAAAGAAAAC TATAATTCCA TAAAGGATCT
AAAATAAAAC GNGTAAATGG AAAGACAAGA TGTGTTGGA GATACGAAGA ATCCATGATT AAGTTAGAGG ATTCCTGGAT
GACAGTAGAG TAGAAAGCAC CAAGAATGAG TCTGTATACC CAGAGAACAC TTACGCTGGT AGGAATCTAT CTCATACAAC
TATTATGGAG CTCTCAAAGT ATACTG

SEQ ID NO:1660: (Length of Sequence = 240 Nucleotides)

GATAGAATAG CCAGCCTTCC ACTTGAATGC ACTGCCATAT TGTCAGCTG CATTCTTTAA GCATCACTTC TTAGAGGCCT
CAAGCTTCTC GGGAAATGTT GATGACTTAA AGGGGAAATG AACAGGTG CAAATATGCTT GTCAAGNTTC TTCTGTGAA
CCTCTATTG GACAATTCAC AAAAAAAG AAAGCAGCTC ATTTTCTAAT TCAGGATATT ATTTCTTTTT AAACTGGTA

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TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT
 GCTGGACTGA GGACCACT TTAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA
 CTGAGGAGTA GCTGAGAGGA AAATGAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA
 AGGGTGGGGT TTTATGINTG GGAAAGGGAC CGAAGCCCA GGCTGAAGAG TTTTAACTTT GGGCCAGAA ACTCAACCAT
 CAATGGAAAC AGGGCAGT

SEQ ID NO:1649: (Length of Sequence = 275 Nucleotides)

GCACTTNAG GATTGAGACC CGAAGGCTT CAAAGGCTGT CGCAAGGAGG AAGAACTGGA AGAAGTTCGG GAACTCAGAG
 TTTGACCCCC CCGGACCCAA TGIGGCCACC ACCACTGTCA GTGACGATGT CTCTATGACG TTCATCACCA GCAAAGAGGA
 CCTGAACTGC CAGGAGGAGG AGGACCCAT GAACAACTC AAGGGCCAGA AGATCGTGT CTGCCGATC TNCAGGGCG
 ACCACTTGGA CCACCCGNTG CCCCTACAAG GATAC

SEQ ID NO:1650: (Length of Sequence = 270 Nucleotides)

AAAAGCCAGA GGGATGAGAA TGAGAAAGTT AAAAGGGAGG TCAGGAAAGC CATCTTTTAG GAGAAATATA AATNGACAAT
 SCTTTAAAAA AGGAGCTGCC ATCATATTAT ACCCTGACCC AGCTGGATAC GAACAAATTC AGCCTTGGCA ATGCAAGTCT
 TACATCTATT TTATATAGAT TGTATAAAG AGAACTGGAA GCATTTTCAA GAGGGGTATG TATGTGTTG TGTGTGCTG
 GTAATTAATG AAAGAGAGGC TATTGAATTT

SEQ ID NO:1651: (Length of Sequence = 372 Nucleotides)

TCTTGCTTTT TAATTGTATT TCTAACACT AGAATTTTCT ATTCAAGTT TTGTACGIG GCCTTGCGTC TCCTTAGTAC
 ATTTTATAGT CGCTGTAAAT TGATTCCATT TTTCTTGAAA TTGAATTTCT ATCTGACCTA ATTTCTTCCT TGAATCCTAC
 ATCTCCTTT CTCAATGGAC GCAGTGACG AATGAAGCAT CCAGCAAAGC TTTGTGTGT GATTGTTTAG GAGTCAACC
 TGTTTTGTG GAAGTTGTCT CACAACACT TCTTTTCTG CTTCCTCTCT TTCATATGA CATGTGTTTT CTTCCTCAAT
 GGATTAACCT TATTGATCAT CCTTTGTC TTCTAGCAA AGACGGGTGC TT

SEQ ID NO:1652: (Length of Sequence = 314 Nucleotides)

TTTCTGAGTA TGCTGCACG GATTATTAGC ATGTAAATA GTCAAAGGA CTGGAATAAA CATCAGGAAG ATTTCATAAA
 GTGGTGTAA TAGAAAAAA AGGTAAACA ATGAGCTGCA TGTGTATAAG TATAAGACAC TGATCCAAGT GGTGGCTTCT
 GAACCATGAT ATTACTTAAN CTAGAGTGT AAGGTGAGCT TAAGTCAAAA TAAACAAAG CTCCAAACC CTCATTTTAA
 ACACAGTAGA TAATAGATGA NTCTGTATC TTGGGAGATA GTACAAGCA AANGTTACAG CTGTGTAAA ACCT

SEQ ID NO:1653: (Length of Sequence = 323 Nucleotides)

TAGATATGAT GGCTGGAGCT GCAATAGCTA ACTTGCAACT ATGAGGAAT ATAGGACTTT GGTCTTAACA TTCCTGAGCT
 CCTGAATCAA TACTTTAACT ACCTCTATG AGACTTCTTG TCACATGAGA AAAATTAAGC CCCAAATTAA ACCCCTGCCT
 TINACTGTAA CTCTCAATTG AGCATAATTC CTAAATGNTT TAATCAATTC TACTCTACTC TGGCATGATT TTNAAGGCAT
 TAACCATAAT TTCTTCCAA TCTAAAAAGG GAACCTATAC TTACTGGAGT ATCTAGTATA CATCAGATAC TGTGTATATA
 GGC

SEQ ID NO:1654: (Length of Sequence = 352 Nucleotides)

ATCTTGGCCT GCAGGAACAT GGCAAGGGCG AGTGAAGCAG TGTCACGCAT TTTAGAAGAA TGGCATAAAG CCAAGGTAGA
 AGCAATGACC CTGGACCTCG CTCTGCTCG TAGCGTCAG CATTTTGTG AAGCATTCAG GGGCAAGAA GTGCCCTCTC
 ATGTGCTTGT GTGCAACGCA GCACTTTTG CTCTACCCTG GAGTCTCACC AAAGATGGCC TGGAGACCAC CTTTCAAGTG

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TROCGAGGCG TGAAGCACAA TITAKTTCAA CTGCCATKTK TTCCTTCACA GTAAGRCCTT CTGGRGAAG GAAGCAGTGT
GTTTGAAGTA TACCTTAGGC CAAGCT

SEQ ID NO:1642: (Length of Sequence = 295 Nucleotides)

AAAAGCCCCA GCCTCAGGAC CCCGGTCACA GGCACCCGGG GGTGGGGGTG ACCAGCAGCA GTTCAGAGGC AGGTGTGGGC
AATGTGGGCC TGAGTCTCCT NCCACTCAC GTCACTNCCC GCGGGGACAC AGCGGCATTT NTGGGGCACT NGGCATGCCG
GGTTCCTAAC CTCAATTATT CATTCTGCTC TCAGGCACCT CCTGACGAGA CCTGGGCCA GGAGAGCTCG GCTCGGGGAC
AGAGGAATGA GACTCAGTGG GACGCAGAGN CCAACCCCAT CCCCACCCCT GGGCT

SEQ ID NO:1643: (Length of Sequence = 359 Nucleotides)

ATCATTGGTA GTTTAACTT TTCATCTAAT ATTAGATTGC ATGCAGGATT TTATATCTAA TTACTCTGGC AGATGGCCTT
TAGAAAGTTC AAAAATAAAA TGCAGCAATT CATATTGGCA GATTTACTAT TGAGACCAAT GCTTCTTAA CTAAAAGGTT
TTGTTTAAAA TCGTTAGTTT AGGAAATCTG ATAAAGATTT TTGAATATCA GAGCGTTTAA AAGAGATTCT TACTTTACAT
CTGGCATATT TCTTGTTGTA CATATTATAA TTCCATTGGA ACATGGCTGT CTGTAAACT ATGTATATGA TCCGGAAGAG
ACTCAAATTA AATTAAGGTT TAACAGCCAT CAAGTTCAT

SEQ ID NO:1644: (Length of Sequence = 293 Nucleotides)

TGAACCCGGG NGGCGGASTT GCAGTCAGCC GAGATGGCAC CACTGCACTC CAGCCTGGGT GACAGAGCCA GACTCTGTCT
CAAGAAAAA AAAAGAATTA AAAGATGTGA ACAAAGCAA GAAAGTCTG TATGAACGAA ACGGAAATAT CAATGAAGAG
AAATAAAAT TATAAAATTC AGGAAATGAG ANGTACANTA NCAGNAAATT CACTGGAGAG ATTCAAAAGC ATATCTGAGC
AGGTAAAAA AGTAGTGAAC ATGAGATAGG TCAAGGGAAA AGTACTGAGT CTG

SEQ ID NO:1645: (Length of Sequence = 332 Nucleotides)

AAAAGCTGGA TATTAGGAAA TGTAATATT AATTCTGAAT TTGTTACTGA CTCAGGATGA CCTTGCATGA TGCATCCAAC
CTTCTTTTCT CTATATCAGA AACTAAAGA ATAAATGTAA CATCACATTC TTTTCTCCTT TGGGACAAAC AACTATGTAC
AATTGAATAA AATGAAATT GCATAAGTNG TGGATAGAAT ATGTTTGGGT TGGTTTGAAC TTAGCACACT GTTTAATAAT
TCAACATTTT TTATACCTGT GCAATAAATT TTTAAATGAT GTCTGAAATG CTTTGAATC TTCAGAAACA GGTTTATAAA
TGGCATAAAA AA

SEQ ID NO:1646: (Length of Sequence = 210 Nucleotides)

GAAAGINCTC CCAATCACTC TCTGCACAAT GAAGTGGCGG ATGACTCCCA GCTTGAAAAG GCAAATCTCA TAGAGCTGGA
AGATGACAGT CACAGCGGAA AGCGGTGGAA TCCACATAG CCTGAGTGGC CTGCAAGATC CAATTATAGC TCGGATGTCC
ATTTGTTTCA AAGACAAGAA AAGCCCTTCC GAATGCAGCT TTGTTAGCCA

SEQ ID NO:1647: (Length of Sequence = 246 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA
CTNAGGAGTA GCTGAGAGGA AATNAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCAGAG GAGCAGACAG AGAAATGTGA
AGGGTT

SEQ ID NO:1648: (Length of Sequence = 338 Nucleotides)

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CAAACTCAC TTGACCCCA TTAAGAGGCA AGCCTGGCAC ATCTATCCCT GGGCCTTTAG AAAGCCATTT GCCTCAAATG
 GCTATAGGGT TGIGGGGTGG AGGGAGGAAG GGCTGGGAGG GAGTNGGAG GAATTGCTAG CTGTAGTGTG ACACATTGTA
 GTGTTGCCA GGAAATGAGC CAGACATGGT GGTGTATGCC TGTAGTCCA GCCACCCAGA AGGCTGAGGC AGGAGGATCG
 CTTGAGACCA AGAGTTTGGC CTGCGGTA GCTGTTAATG ACCACGGCAC TCAAGCCTGG GCAATGTAGC AAGATCCTGT
 TTTCTACAAG AAATTTTTTA AAAATGAGC CAAGTTTGGG TGGTGCATGC CTGTAGTCC ACTA

SEQ ID NO:1636: (Length of Sequence = 362 Nucleotides)

CAAAATGACT GACTACAGCA ATGCTTCCG TGTGCCCCAC ACATCATGAG CACCGCAAGA GACAAAAGAT TAACTATGAA
 ATATAGTAAT CTAAGCAAGC CCACACATAC ATATTTTTGG GGATTTCCCA CCATCCTGAA TAGTATCACT GCAGTTGACA
 CAACTTCCAG GGAAGTGCAG AGTAAAGTCT TAATATTATC CACGAGAAAG CAAAATAAA TATTAGTGTG CACATTTCTG
 AATGAGAAAC TAATTGCTTC ATTGATTICA ACAATGTAGT GGNAGNAAAC TATTTAGAT CTCTACAATG CCTAAATGCA
 TTCTATTAA ACTCAAGGTA CTATTTTCAT TTTTACCATA CT

SEQ ID NO:1637: (Length of Sequence = 205 Nucleotides)

GGGCCCCGAC GAGGCTCAGA CCTCTTNTAC GNCAGTACT ACGAGGACGG CGAGGTGGAG GAGGAGGCCG ACAGCTGCTT
 CGGGGACGAT GAGGATNACT CTGGCAGGGA GGAGTCTTNA CACCACCAGA ATAACTTGC CGAGTTTANC TCACTAGGGC
 CGGACCGTG GCTCCTTAGA CGACAGACTA CCTCAGGAG GTTTT

SEQ ID NO:1638: (Length of Sequence = 253 Nucleotides)

CACTCAGGCT CACCGTCTG CTCTCTGCAC CAGCCTTCC AGAGCATNCC AGTNCATG GCTTCATCTG TTAAGTGTG
 ATCCTTCAG TCCGATTTT TAGACCTAAA TGGTTTCTT AACGCCATTC TAACTGCCG TGACTCATTT TCACTTACAG
 TGTATTGT AACGCCAAC CAACAAATCA CAGGTGCTTG CTCTGTCCA TAAATCTCCC CAGTCTAAT TTTGTGATT
 CAACATGRCT CGT

SEQ ID NO:1639: (Length of Sequence = 360 Nucleotides)

TGTGGCCAAG GACCCTATCG TCAATGTATG GTACTCTGTG AATGGTGAGA GGCTGGGCAC CTACATGGGC CATAACGGAG
 CTGTGTGGTG TGTGGACGCT GACTGGGACA CCAAGCATGT CCTCACTGGC TCAGCTGACA ACAGCTGTG TCTCTGGAC
 TGTGAACAG GAAAGCAGCT GGCCCTTCTC AAGACCAAT CCGCTGTCCG GACCTGCGT TTINACTTTG GGGGCAACAT
 CATCATGTTT TCCACGGACA AGCAGATGGG CTACCACTGC TTTTGTGAGC TTTTTTGGAC CTGCGGGATC CGAGCCAGAT
 TGACAACAAA TGAGCCCTTA CATGAAGATC CCTTGCAATG

SEQ ID NO:1640: (Length of Sequence = 321 Nucleotides)

GTTGGGAGCC CTCGCTCTG TCCGTAGAGC AATGCTTCT CCATGGGGCA GCATNGGCC TGGATGGGCC TGAGCATAGC
 AGACCACTG GTACATGTG CATGTGTGA CATGTGTGA TGTGTGATA TGTATGCTCC TGAGTGTATC TGCATGTCTT
 NCCTGCACAC ACAGTGTCTC CCTCGATGC TGCCAGCCTG TGGTGGACTT CCTCTTCTGA CCCCTTCTT GCNCGGGC
 TGTTTTATCA GTGAAAGGAC TTAATAAGC AGATCTCCAG GTTCACCTIN TGGAACTCAG CTCAAGGTA GCACAGCAGG
 T

SEQ ID NO:1641: (Length of Sequence = 266 Nucleotides)

GGTGGTGCCA CTGTCTGAT AGTTTTTCCC ATCTTAGTAG CCGNACCCAT AATTAATGCC TACTCACATC AAGTTAGCAC
 CACTCAAATG TGGGCCATTC ACAGGCAGCC AGGGATCCTC TTGNCCTG AGGTGGGGG CTTCATCAG AATGCAAATC

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ATAATGATTTC CACTTGTGTCAT GAACACCATG AAGGTATCTT GGCAGCCAGA GTCACCTCTG TTCCCGAAGT GGGAAACCTN
GGGAGGGTCC TCAAAACCCC T

SEQ ID NO:1630: (Length of Sequence = 380 Nucleotides)

CATAAAACCA TCCTACGATG TGCTGCTGCT GCTGCTGCTG CTAGTGTCTC TGCTGCAGGC CGGCCTCAAC ACGGSCACCG
CCATCCAGTG CGTGGCTTC AAGGTCAGTG CAAGGCTGCA GGGTGCATCC TGGGACACCC AGAACGGCCC GCAGGAGCGC
CTGGCTGGGG AGGTGGCCAG GAGCCCCCTG AAGGAGTTG ACAAGGAGAA AGCCTGGAGA GCGTCTGTGG TGCAAATGGC
CCAGTGACCC CCAGACGGCG AAACCGGGTG GCAGCGCCAG CCTGGGCCCA GGCATGGAAA CGGACAACCC CTAATCGCCT
TAGCTACTGC TTCTAACAACT TCCTTCCCT TGTGTTAAGG GAAACCAAGT TCAAGGGGGG

SEQ ID NO:1631: (Length of Sequence = 383 Nucleotides)

AGAGGATTIA TTGGACAGG GCTGTGCTGA GAGTCCACCT CTCACCCAC AATGGGGGGG GGCCTGGCA TCGAACACCA
AGCTGAGTGA GAAGGGCTCC TCCAGGCTC GCAGGAGCT TGCTGGCTTC TCCTGGCTCA CAGCAGACTG GGCCGACTC
CCATCGGAGG AAGGCCAGCA TCCTAGGGCA GCCAGTGGAG GGCTGGCAGA GGGCTGTGCC TNGAAGGTCA CTGTGCTATC
TTCCAACCAC ACTGTGTGAG TCTCAGATAC CATATGTGGA ATCTGCATCA GGAAGGTCAA CTGAGGTCA TTTTAAAGG
GATTCCTCCG GNAAGAGGAG CNGCGCATCG GCGGCTTAA NCCGGCGTTT CGGTTTCATCC CGA

SEQ ID NO:1632: (Length of Sequence = 424 Nucleotides)

GGGAAGTGAG CTCCTGAACC AACTCTGAAG GAGACACCCA CTGTCTAAGC CAGTCTCACT CTAGGACACC TGCTAGCGA
CCAGCAAACC TGGAAATGAA GGGCAAGTTC CTCAGTGCCT CCTCTGCATC AAAGGGAGTG GCTCTGCCCT CTCTAGTCTC
TGACTACCTG CTAGTGAAT TTGCTTCTG TGCTCCAGA CCCAAGAAA CCACGCTCTT TTCTTCCCT CATGACTCA
TCCCCTTCTT ACCCTATATT GTCTCCTCCA CTCTCTGCT CTGCTGGCCA GGCTTAAATC TGGGCCACCA GCCTTCCCTG
GACATACCTA TTCCGCAAC TGAACCTTCC CAACCCCTAG GAAACCAAAG GTATTTTACA AGGCCTCTGG ACCTTGACCC
AAAGAGGCAT GNACCATAT TACT

SEQ ID NO:1633: (Length of Sequence = 417 Nucleotides)

TTTTTCTAC AGCATCTTTT TATGTCTTT ACCATTACTT TAATGCATTT TAAAATTIAT CTACATTAAT TGGGAACCTAT
TGTATTTT TTCTCTCT CTCTCTTTT CTTTNCCTT TTTGGATTT GTCTTGCCA GAGAGGTTCT CCAACACCCG
GGTGGACTTG GAATTTTTTA TCAGCTGCAA TCTGAAGACT TGTCTTACT GTGGAATAGG TGACATTCCT TTAGGACCTC
AGAAGCTCAA GTAGTTTAAT GCCAAGTCTT TCCAGAGCCT CACTCTCTT TATTTTTTAA ATTAGAATG TGATTTATG
AAGNCTTACC ATGGGGTTCA TATAATTINT NAATNGANCA GCTTTATGA GGTATAATTC AATACCCCTT TAAAGNATGT
AACCCGTGGG TTTAGAC

SEQ ID NO:1634: (Length of Sequence = 423 Nucleotides)

AATATCCCAA ATGTGCAATG CATCACCTGA GACAGAAGGC AGAAAGCATC AAGCTCTCTG TTTATCCCAA TTCAATGACA
ACCAGAACTT ATTTTTTTG AGATGGGGTC TCGTTCGTC GCCAGGCTG GAGTGCAGTG GGGCATTTCAT GGCTCATCGC
AGCCTCCAAC TCTAGTCTC AAGCAACCTT CCTACGTCAG TGCTCTGAGT AGCTGGAATC ACAGGCATGC ACCACCACAC
TTGGCTCAT TTTAAAAAAT TTCTGTAGA GACAGGATCT TGCTACATG CCCAGGCTTG AGGTGCCGTG GTGCATTAC
AGCTCACCGC AGCTCAAAT CTTTGGTCTC AAGGATCCT CTTGCTCAG CTTCTGGGT GGCCTGGGCT CAGGCATACA
CCACCATGTC TTGTCAAT TCT

SEQ ID NO:1635: (Length of Sequence = 384 Nucleotides)

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CTCCCAAAGN GTTGGGATTA CAGGNGTGA CANCCGTGCC CAGCCGTAAG GTTAAGATAT TTTAAAAANA TCTCTGCAAG
TTGAGGAAGT NTTTCAGGAC TCTTCTCTGC TTAGTCTCAC T

SEQ ID NO:1624: (Length of Sequence = 350 Nucleotides)

CTTTGTGAGC TTTTGTGACCT GCGGGATCCG AGCCAGATTG ACAACAATGA GCCCTACATG AAGATCCCTT GCAATGACTC
TAAATCACC AGTGCTGTTT GGGGACCCCT GGGGGAGTGC ATCATCGCTG GCCATGAGAG TGGAGAGCTC AACCAGTATA
GTGCCAAGTC TGGAGAGGTG TTGGTGAATG TTAAGGAGCA CTCCCGGCAG ATCAACGACA TCCAGTTATC CAGGGACATG
ACCATGTTTN TGACCGCGTC CAAGGACAAC ACAGCCAAGC TTTTGTGACTC CACAACCTCTT GAACATCAGA AGACTTTCCG
GACAGAACGT CCTGTCAACT CAGCTGCCCT

SEQ ID NO:1625: (Length of Sequence = 333 Nucleotides)

GTCTTCTGTG AGACAAAGAA ATTATAAAGA TGGCAGAAAT TATTAGCGAC GTTCTACCTC TATAATTAC GTTCCATGAA
TCAGTACTTC ATTTCTTTTT TATGGATGAA TTAATATTCC ACTGTACAAA TATACCACAT CTGTGTTTTT CATTCGTCTA
GGTTAAAAAA TTTTATTTTT TATTTTATT TTTTGTAGA GACGGGATCT CACTGTGTG CCCAGGCTGG TCTTGACCTC
CTGGGCTCAA GTGATCCTCC CACCGTGGCA GTCCAAAGTG GGTAACCTGT ACGCTGGTCT GAAAGACCTT GCTGAAGAGA
GAAGAGGCAA GCT

SEQ ID NO:1626: (Length of Sequence = 314 Nucleotides)

GACTGTCCGT GGACACTGGT TTTTAAGCCC AAGAACTGAA TATACAGTAG CAGTGCAGAC TGCCTCAAAA CAAGTTGATG
GTGATTATGT TGTGTCTGAA TGGAGTGAAA TTATAGAAAT CTGCACCGCA GACTATTCAA AAGTTCATCT AACACAATTG
TGGAGAAGG CTGAAGTGAT TNCAGGACGC ATGCTTAAGT TTTCTGTTTT TTATCGTAAT CAGCACAAAG NATATTTTGA
CTATGTTCCG TAAGNITCAA AAATATATAG TGATTTGTTT TACTAAATAT AGTTTCAAAT TCTAGGCTCA GGGT

SEQ ID NO:1627: (Length of Sequence = 375 Nucleotides)

CCCTGGGCAC CTGGTACCTG GGGACCTACA AGGTGGTGAG GGAAGGGTAC GAGTACATTC CTNTCCCTC TGACCTGGGC
GCTAGAAGGG CAAAGAACCC GAGCCTGCCA GCTTGGCCTC CTCCACAGC CTCCCTCGGA GGCATGCCAT GCCAAGCACT
CTTCTGTCT CTGTTCATGA ATAAAAGAGA TGGATGGGCT TATCTTTATA GAGAAGTGAA TTTCACCTAC TCCCTGGCC
CGAAAACCTAG ACCAAATGAG GAAGTGTGTT AGCTCATCAA ACTGTTATAT TTATTTTCAA CAATGAAAAC AACACAACAA
AGTGGAGTCA ATCCACTAAT TTTTTTAAAT CTAACACAAT TGTTTGCACA ACAAT

SEQ ID NO:1628: (Length of Sequence = 434 Nucleotides)

TGCACAGGCA CACCTCCACT CTTTATATCA TTTCTCCAT CTTTCATTTC CCATCTGTAC CTCCAAAATT TTGCTATGAA
TCTAATTCAT CTTTGTCTC TCTCTCAT GGGTGCCCTT GCTCTGCCA GTCTTCTTC TCTGCCCCA CCCAACTTC
ATGAATTAGT CTTTCTCCC AGGAGCTCTG ATTTCTAGAC TGCTTTGAAA ATGCTGTATT CATTTTGCTA ACTTAGTATT
TGGGTACCT GCTCTTGGC TGTTCTTTT CTGGAGCCCT TCTCAGTCAA GTCTGCGGA TGCTTTCTT TACCTACCCC
TCAGTTTTCC TTAACACGNG NACACAACCTC TGGAGAGTGT TAAGNATAAT GTTACTTGGT AATGTGTATT TATTGAGGAT
TGTTGTGCTA AGAATGNGTA GGTAAATA GGG

SEQ ID NO:1629: (Length of Sequence = 341 Nucleotides)

CCTCAAAGCT GCAGGGAGGT GGGGGTGCC GGCAGACAGG GTGGGGTCC CATCCGTAC CAGTGACAGC AGCCTCTCTT
CTCCACGGT GGTGCTGTT TGGGGCTGTG GCCAAAGTGT TTGCCCGGC CTGACTGTA TCTTCGGA GCTGCCAGG
ACTGCAGAGA GGGCCTGGCT TGTCCTCTT AGGAGCAGCT GGGNNGTGT CTGCTGCA TCCCCTTCA ATGGTTGAAA

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TTTCTTCCAT GCAACANTCT GNAGACTTAA GTGGCTTTCT NCTGTACTNC CATAGAACCC ACCCAGTACA TACCTCCAGT
 GNGSCACTGA TTTTATGCTA TACATATGAC TGTGTGTTCA TCTCCTCCAC CAGACTGTGA GTCCCATGG AGTAGGAACT
 AAATTTTINT CAACACTCTG TCCTCATCAC CTCGTGTAGT ATCTGTGACA GAGTAGATAA TGATTAA

SEQ ID NO:1618: (Length of Sequence = 362 Nucleotides)

GGAAGSTTTT TAATGCATGA NGTATACTTG TNATCCTGGA GGTGGGAAA GATTAGTAA AGATAAAGTT TGGCAAAAAT
 GATTCTCTCC CTAGGATTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT
 CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC TATGACTTTG GACTTGGCCA
 TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAATGTGCT TTAAGTGCAT GTAATTAGGT CAGTCCCTCC CTCCTTGAGC
 TTCAACTCTC CACCATGAGG ACAACATTGC CTCCTTCTCT GG

SEQ ID NO:1619: (Length of Sequence = 344 Nucleotides)

GCAACCTCAT CCCAGGTTCA AGINATCTC CTGCTCANC CTCCTGAGTA GCTGGGATTA CTGGGCGACC ACCACACCCG
 GCTAATTTTG TATTTTATG AGAGACAGGG TTTCGCCATG TTGGCCAGGC TGGTCTGAA CTCCTGACCT CAGGTGATCC
 ACCCACTCA GCCTTCCAAA GTGCTGGGAT TCCAGGCATG AGCTACTGTA TOGGCCCAA TCTTCTTAA GTTGTGTCTG
 GCCTTTGGCA GAAATAGCCA CAAAGNCAGG GTAGGAACGT TTTACTCTTC AAGTGATGAT GGCATCCGAT AANCTTTTAG
 AGGGAGGTTT TTAAATGCA ACGT

SEQ ID NO:1620: (Length of Sequence = 379 Nucleotides)

GCCAGCCGAA GCTCCTCAGG CTCACCCCT CTACAGCTC CTTCTGCTCC AGCCCACTC ACCAGGCCG AGTTCCACCC
 TAGCACCTTC CCTGGGAATN ATCTCCCCCT GGTGGCTCT TCTTACTTAT TCAGCCTCAA ATGINATCTC CACTGANAGG
 CCTTCTCTGA CTTGCTGAGC TTGATCCCT CCCCTCCCA GTNACATTAC TCCGTGTTAT GGTACCCATC CTTGTCTCCT
 TAGCTGTGTT TTGTCTGTAT TGGCTCTTC ACTAGACTGT AAGCTGCATG AGGGCAGGGG ATGTCTGTTT AATNCCAGTT
 GCTCAGGATA GTGTATGGCT CGTGATAGAT GCCTAGNACA TTTTAAATG GGGACGGAT

SEQ ID NO:1621: (Length of Sequence = 283 Nucleotides)

GATTTGGGG CTCGGGAGG CAGAGAATCT CTTGGGAGTC TTGGGTGGG CTGGTGCAAT CTGTTTCTC TTGATCTCAA
 AGGACAATGT GGATTNGGG ACCAAAGGC AGGGACACAT CCCCTTAGAG GACCTGAGTT TNGGAGAGTG GTGAGTGAA
 GGGAGGAGCA GCAAGAAGCA GCCTGTTTC ACTCAGCTTA ATTCTCTTC CCAGATAAGG CAAGCCAGTC ATGGAATCTT
 GCTGCAGGAC CTCCTCTAC TACTTCTGT CCTAAAAATA GGG

SEQ ID NO:1622: (Length of Sequence = 356 Nucleotides)

TTAATTTTAA AGCAGATAAT ATTTCAAATA TTTCTTTGA AATAGACCAT TGTCTCTGCC TTGAAGTATG TTAGTACATT
 TTAAGAAAGT CAGTGGGTTA AGGAGTCAGT GCTGTTAGTA TTCATGCTTA AAACACTTCC CTTCTACCTA CCTAATAAA
 TGAGGGGCTC AAGAGAAATA TTTCTAATTC TCTAGCGACA TGGCTAATTT TTTTTTTTAA TGTATTTTGT TATTTTATG
 ACAGATGGAG TTTCAACATG TTGGTCAGGC TGGTCTCAA CTCCTGAGCT CAAGTGATCT GCCTACCICA GGCTCCTGAG
 TCACTGAGAC TGTAGTTGTG TGCCACCATG CCAGGT

SEQ ID NO:1623: (Length of Sequence = 361 Nucleotides)

TTTGAGACAG AGTCTCGCTC TTTCGCCAG GCTGGACTGC AGTGGCACTA TCTCAGCTCA CTGCAAGCTC CACCTCCCGG
 GTTCACGCCA TTCTCTGCC TCAGCCTCCC GAGTAGCTGG GACTACAGGC GCCCGCCACC ACGCCTGENT AATTTTTTGT
 ATTTTTAGTA GAGACGGGGT TTNACCATGT TAGCCAGGAT GGCTCGATC TCTGACCTC GTTGATCCGC CTCCTCGGN

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TGGAGATATA GAGGTAAACA AGTCTGACAT GATCTATGCT ACCACGGAGT TCTTATTTTC AAAGTGAAG GTAGAAAATA
 AATAAAAATG ANCTAGAAGA GCAAAGTGCC TCTGAATGAG CATGCAGANG CATGTTTTCA AAATGTCGT GNGTGGGATA
 AATAGATCAG CAACACACCA GGCCATGCAA TTINGCAGCA AATCACITCT GCACTCTAGC TGCTGTTTTT CCTACTCTGG
 AATCATACTC CCCCCTTGG TCATCTINTG CAGTTTNCCT GNGCTTCACC CTACCCCTCN TTTTN

SEQ ID NO:1612: (Length of Sequence = 458 Nucleotides)

ATGAAATTGA ACAACCTAA AGAGAAATGT TCTTACCGTT CCACAGGAAC CAGCTTCTTC CACTGGGCCA CTAGGTCCCT
 GGCAAAGCTT CCAACATGCT CGTGTTCG CAAGCTATTT ACTGTTTTCC CAACCCCACT CTCTAAAT TTGACAAAGT
 AATTGTTAGA GGGGTCTGGA ACTAGGCTAA CGTTTTCTA AAGAAATAAG GCTTTCTACT TTGAGAACT CAACAAGCAA
 TACTTCCTTC CTACAACATA CCTGCAAAT CTTAACACTA AATTACTTTG TGTCTATGNC CCAAATCTCT AATGACACAC
 AGTAGCAAAG NGTACCAAGT TCAGAACTTT AATAACAGNG GTNATTAGGG CAGGTGTTAG GGCACAGNT AAGNGCTTTG
 CATCAGTTCT GGATCAGNCT TTTAAATAAC COCTTAAGNG GGGNTAGNC CCTTTTTT

SEQ ID NO:1613: (Length of Sequence = 322 Nucleotides)

ATGTGGAGAT TGTGTGTTGG CTAGGGCAGT CCAGAGGAGA GATATGTGGC AGGACAAGTC TCTACCTTAT ACAAGINCTT
 CCGGCAAGCC CTCAGCATAT GACATAGGCC CAGAGAAGGA TGCAAAGAAT TCTGGTCATA AATGTTTTTC AAATATCAAA
 TAAATCATAT GTGCACATGC ACAACATGC CTTCACAACT GAGTAAAACC AGACTCACCT TCAAATATAT CAACAGTTTT
 NTCAAGCGCC GTTAAAAATC AGGCATCGGA CCTCTGNNIN CGAGAGCTGG TTNATGGGG AAGTTAGATC AACCCGTCAT
 CT

SEQ ID NO:1614: (Length of Sequence = 280 Nucleotides)

AGTATCAAGG GATAAAATAT ATTTTAAATT TTGTATTICA CTGAAAATT GTAAGNCCA TTTTATAATG TATGCTTGC
 AAAATAAGTC ATGGAAGCCC TGAAAAATTA GTCAATTCAC TAATCAAGA AACATATATT AAAGACCTAC TATGCATGAG
 GCACCATGCT AATTGCTTTG AAGAAGACAA AGTTGAATTA GACAGGNTC CGTTTACAA GNTATTTACA ATGCAAAGGG
 GGATACAAGA CATATAAAG GCTATGGAAC TGCCCTTCOG

SEQ ID NO:1615: (Length of Sequence = 393 Nucleotides)

GCGTGGTGGT GCGTGCTGT AAATCCCAGC TACTACGGAG TCTGAGGCAG GAAAATCCCT TGAACCAGGG AGTCGGAGGT
 TGCAGTGAGC CGAGAGCAGG CCACTINCACT CCGCCTAGC GACAGANTGA GACTCCGTCT CAAAACAAA CAAAACAAA
 CAAAAACCA AAAACACTGG GAGTCCCAGT TTGTAGGAAA TCATTAAGAT TTTATTATTT GAGCTCCAGA ACGAGTGAGG
 ATGACCTGAT AATTTTGGTT TGCTCAGGT TGTAAATGTT TCTGTTTTG CTCGATGACT ACTAGAACAG TTCTCAAAT
 GTGTGGTGGG TAAGAATCAC CTGGGGACTT TGACCAAGIN ACATGTCTAC AACACCCGGC CCTACAGGC TCT

SEQ ID NO:1616: (Length of Sequence = 353 Nucleotides)

CCACCCAGC CTCCTTGAG CTATCCCTTT CTATCCCTCT CCATCCAGCC CCTGGCCACC ACCATTATAT CTATTCTGGA
 ATTCCACAG GAAAGCAGG CACTTTATAA ATCAGCGAGG GATTCAAGGC GAAATGAGAC TGTTCGTGAG TNATGGGGIN
 CCGGGTGTCT TGCCGTGCT GCGCGCCGNC GGGAGAGCCC GGGGAGAGC AGAGGTGCTC ATCAGCACTG TAGGCCGGA
 AGATTGINTG GINCCGTTC TGACCGGNC TAAGSTCCCT GTCTGTCAGC TGGATAGCG CANCTANCIN TTCTCCACTA
 GTGCAATCTG CGATATTTT TTTTGTGTA TCT

SEQ ID NO:1617: (Length of Sequence = 227 Nucleotides)

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GACAGACATT CAAACCATGG CAGGTGGCAA GAAGTATCAA ACTACTAGAT CCTTGGGATT GINCTTTGTA CTGGGGTGTA
TTTTTNCCAA CAATCCTAAA AATCATATGA ATAGAGATAG CAATATATAT CINACCCATT TGGAAATGCA CAGAGATTCA
GGAGTGTTC CATAGAAACA GAAGATCATT GGCTTTTGTC CATTCCCAAC GCCAGNAATC TGTTTCCTT GACTCTTTTT
GATCTGTGTT TCTGAATGTA TTGATATACT GCGCCTACTG GGTGTGCAGG

SEQ ID NO:1606: (Length of Sequence = 290 Nucleotides)

CTCACTTGGG TACTACAGTG TGAAGCTGA GTGCATATGG TATATTINAT TCATTTTGT AAAGCGTTCT GTTTGTGTT
TACTAATTGG GATGTCATAG TACTTGGCTG CCGGGTTTGT TTGTTTTTGG GGAAATTTG AAAAGTGGAG TTGATATTAA
AAATAAATGT GTATGTGTGT ACATATATAT ACACACACAT ACACATATAT TATGCATGTG GTGAAAAGAA TTGGCTAGAT
AGGGGATTTT CCGAACACT GCAAAAATAG AACGTAGCAA AATGGCTTCA

SEQ ID NO:1607: (Length of Sequence = 365 Nucleotides)

GCTCCACTGA CCAGCTGTTC CCTGTCTCTC CTTCCTCTTG AGCCTCCCTC TTCCCTGAGA CACAATAATA TTAAATTTG
GCCAATCAAT AACTCAACAA TGGTGTCTAA TAATGTGTCA GGTGCGAGGA AGAGGCATAC ATCTCTCACT TTAATCAAA
AGCTAGAAAT GATTAAGCTT AGTGAGGAAG GCATGTCAA AGCGAGACA GACCAAAAGC TAGGCCTTTT GTGCCAGTTA
GCTAAGATGT GACTATAAAG AAAAGCTGTC GAGGGAAATT TAGAATGGTA CTCCAGGGGA ACACACAATG ATAAGGAAGC
AAACAGCCTT ACTACTNGGA TATGGGGAAA AGTTTTCAGC TTGG

SEQ ID NO:1608: (Length of Sequence = 294 Nucleotides)

CTCAGGAAGC CTCCTTTCT TCACCTACCA TTACTAATC TCCAAGCATA GAAATCCCTG GGAATTGCGA GAATAACTCC
CACTATTTTA AAATTTATAT TCAGATTTGT TTCGTTTCAT AAGACACATC AAACAGGCCT ATACAAAAGG TTTAGGAAAA
GAAACAATG GTGAGTCCCG GCCCTCTTCG AATTCAGTG CACCTCATGC AAGTNTAGGA AGGCACGCTG GATCGTCTAT
CTGATCCAA AGCTGTCTT TGCCATCTCA TCCCTTGNC TGCCCCCAA CCCT

SEQ ID NO:1609: (Length of Sequence = 393 Nucleotides)

CAAAAGCTAA CTCCTAATAA GAAGATGAGG AAATAAAATC AGTTCAAAAG GGAGGAATAT GCATTCCCAG AATTAAAGGA
CCCCGGGTCC AGTTTGAGGA GGAATCTTGG CCAGATACAA GCCCTTGTA TAATNCTCAA GAGGGAGGAG ACCTTATTTN
CTCCTTGAG GTGTCTAGTA TGAANCTGC TTATTTTGAA ATGTGATCT AGCCATTATC AGNGCAACT GCAGATAATT
CCCATTTACA GAGGAATGCT GCTAACAGGT GTGGGNGGGA GCAGCGACAN CGNAAAATTC TGCTGTCTATA GGTACGTTT
ATGTTGGTTT TCTTTGAAAA TCAAGGGGTA GAAAATTTCA TGCCTCTAGA GGAGAGAGAG GAAACACATG AGG

SEQ ID NO:1610: (Length of Sequence = 464 Nucleotides)

TGCTGTATT TATTAAATTG CCTTACTAC TTTTAGATGG CCATACGTTT TCAAAAGCAA AGACCTAGTA AGCCATTGT
GTTCATTGTC TAAGCTATCT TAGGTACAGG TCCAGATTAT AAATGTTACC TGCTAATCAG AGAGCAAATT TTTAAATTAA
TCACTTGTA ATCCACATTA AAAGAAAAG AAACCTAGAA AAACACATAA ATTTCTTTTG TGATCCCACT ATTCAGGAAA
ATCCATTGAA AAAGCAGATG ACTTATCCGT GTTAAATTTT TAAAGNCCCT ATTTAACTG TCATGTAAAT TCTNATTTAT
CTAATTTTTT AAAACACATA TAGNNTTTTA CTCTCCAGTT CCATAANTEN CTCANTCTG GTGANGGTCA TTACAACAGN
CATTACGNGG GCATATCGGN NTAAAANGGC CNIGCGGTCC TGNATCNGAG NGGGGGTTAA GGTC

SEQ ID NO:1611: (Length of Sequence = 465 Nucleotides)

ATAATTTAAA GAAAAGAGAA TTCTACAATG TAAACCCCTT TAATATAAGC TGTTTTAATA ATTGGAAAAC AGAATGANTA
NTGTTTTINT TTGTCATGCC CAATTATTC ANCAAGTTT TATTAATAAC TIGCTACATG GTAGGCACAG CTGTAGGTGT

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TGTATTGCTA ACTGTCTTTG TAACTAATTT ATGTATACNC TAAATGGTAT AGCATGTGAT TTTATTATAG TTGATTAACT
 TTGTAATTNC TGTAAGTCA TOGATATCCC AGTCTACCTG GAAAATTAAG TCTATTAAAC ATAGTTGCTG TGGGAGACAG
 TACTATTGCC AACTGAAGOC TGAATCCCTC ATTTATTTTG TCCCCAGTTA CAGAGTGGAG GTTTAGAGGA GTGGGGTTAG
 ATAATGCTCA GATTAGAAAT ACAAAGGCAG CTGTCAGATC CTCCCATTTT ATTTGTTTGA AGGAAGTGAAG GTTGGTAAAC
 ATCACAAGNG CTAGTTAACT GGTGAGTAGC AGCCC

SEQ ID NO:1599: (Length of Sequence = 313 Nucleotides)

GGAGGTGAAG GACACAGTGG ATGGGCAGAG GNTCCTGGAG AAGAAGGGCA GTNCTGCNCT CAAGGACCTC AAGCGGCANT
 GCATTTGGAG CGGAAACGGG CAGATAAGCT GCAGGAGOGA CTNCAGGACA TCCTCACTAA CAGCAAGAGC CGCTCAGGCC
 TTNAGGAGCT GGTTCCTCA GAGATGAAGT CACCAAGCCG GACCCAGACA GGGGACAGCA GTAGCATCTC CTCCTTCAGC
 TACCGGGAGA TCITTOGGGA AAAGGAGGAG CTTCGGCTTG TTCCAGCCAG GTCTTATCC AGCAGNCCTN AAG

SEQ ID NO:1600: (Length of Sequence = 277 Nucleotides)

AGTTCACAGA ACTCCAATTC TTTATTATTC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGAGTAAA
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGACTTCA AACTGCGAT AGGTACTTAT GTTGGGTATC
 TGGTGATTCT TAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAAGTGGT CANITTCACA GATGGAGTGT TTTGTGTGTG
 GTGTGTGTAG TAGGCAGGAT TGCCTTACAC TGGGGGA

SEQ ID NO:1601: (Length of Sequence = 228 Nucleotides)

TTGAGACCAT CCAGGCTAAC ACGGTGAAAC CCGTCTCTA CTAAAAATCC AAAAAAAAAA AAAAAAATT AGCCGGGCGT
 GGTGGCTTGC GCCTGAAGTC CCAGCCACTA AGGAGGCTGA GGCAGGAGAA TGGCATGAAC CTGGGAGGCG GAGTTGCAGT
 GAGCOGAGAT CGCGCCACTG CACTCCAGCC TCGGOGACAA AGCAAGACTC TGCTCAAAA AAAAAAAA

SEQ ID NO:1602: (Length of Sequence = 299 Nucleotides)

GGAAGTCCTT TCTAATGAAG AGGGGAGATG TTATOGATTA TNCATCATCA GGGGTTTCCA CCAACGATGC TTCCCCCTG
 GTTCCTATCA CTGAAGAAGA TGAAAAATCA GATCAGTCAG GCAGTAAGCT TCTCCCAGGC AAGAAATCTT CCGAAAGGTC
 AAGCCTCTTC CAGACAGATT TGAAGCTTAA GGGAGTGGG CTGCGCTATC AAAAACTCCC AAGTGACGAG GATGAATCTG
 GCACAGAAGA ATCAGATAAC ACTCCACTGC TCAAAGGATG ACAAAGACAG NAAAGCCGA

SEQ ID NO:1603: (Length of Sequence = 263 Nucleotides)

AAGGCAAGAA ATTAGCCTTG TTAAGAAATTT TAAGTGTAAAT GGGAAGCCAT TAGAGGGTTT TAAACAAGGA AAGATGTGAT
 GTGACTTATA TTCTAATAGG ATTGCCTTGA TTCACCTATG GAGAATGGAT TNNITGGATC TCAGTACTGG GATACTGAGA
 TCCAGGGGG AAAATATCAC TAAGGTGGA ATTGCTTTTC TGCACATTAA AAGCAATTCT CTTTTCTCTT GAAACCTCCA
 TGTGATGTAA ATTAGGGTAA ATG

SEQ ID NO:1604: (Length of Sequence = 260 Nucleotides)

ATGAAGACGT ACGACTTAT TTTGTGTTCT GAACATAAGT NCTTTGTCAC ATAAATGTG CTATGAATGT TGAGTTTAA
 ATACTCGAGC GTGACTCAC GCCTGTAATC CCAGCACTTC GGGAGGCCAA GGCGGGCGGT TCACCTGAGG TCAGGAGTTC
 GAAACCACTG TGGCAACAT GGTGAAAACC CGTCTCTAC TAAAAATACA AAAGTAGCGG GGTGTCGTGG CGTATGCTGG
 TAATCCTAGG GTTCTGTCA

SEQ ID NO:1605: (Length of Sequence = 290 Nucleotides)

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SEQ ID NO:1592: (Length of Sequence = 299 Nucleotides)

GGAATTCCTCA AATTATGGGT AGTCCAAAAG CCAAAGGCAA TGTGAGGAAG GACACTCCCC AGATAAGAAC AAAAACAGAA
 ATCTGTATGT NCTATGIGTT ACACACAGTT GCGAATAATC AGATGTACAC ACATGATGCA AAGGCACGCC GCTACACATT
 TATGTGATAT TCAGACATAT GTTCAAATAG AGGAGGTGAA TATCTTTTAA TAAATACAAT TTAGCAAGTA CAAGAATGCT
 GATCAGCTGC AGCTCAAGAG GAAAGGGGGG AAAAAATCTT ATGGGAAATT ATTAATACT

SEQ ID NO:1593: (Length of Sequence = 378 Nucleotides)

CCAGTTTGGT GATTCTNITC TGTGTCTGCT GATCTATTGG CGTGAGAAGC TGAAAGTGAC CAGCCAACAG CCATAACTTT
 ATGTTTAGTG AGACTCATAA TGGGTCTCCT GCTGGAAGAT CTCCTCTCTA AGANTCAGTA ATTCTAGACC TGCAAAGTTT
 GAAGTTGTAA GCATGGGAAA CACAAATTC CCAATAGGT CCAGATAGTG ATAGAGAATA AGACACTTAC TTGCCTACTT
 CCAATTCTCA GCCCAGATAT TCTACCTATA GTGGACATGC CCATGCAATG GGCTATTGGG TTGAGGTAT ACATTGCACG
 GTTGAAGGAC AGTGCCCTCAT CCTTGACGGG GTGCCCTTTN CCAGTTGGCA CCACAGCT

SEQ ID NO:1594: (Length of Sequence = 353 Nucleotides)

ATTTTINCGG GGGAGGIGTA TGTAGATGAG AGTCTATGAT ATAAAGCAGT AAAAAAATG CTGTTGTATA GGGATGCAAT
 ATTTTCGGTG TAAGGAAGAG GTTTAATTC ATAAATAGA AAACAGGTTG GAGAAGTCTT TAGGAAAGGG ATACCTTTTG
 GGTGCGCTTT TGAAGGAGAA GTTATATACC AGGTTCAGC TGAAGGGCTA AGTGAGTAAC TGAAAGGGCT GAGCTATTTG
 GATTACCATG AGGAATTTGT GATGGCTGGG AATGTAGGGT GTGTGACCAG ATGTGGAATC ACAGAGGGAG CCCACAGAGG
 AGCTTCGGCA CATAANCTAA AGAGTTTAAT TTT

SEQ ID NO:1595: (Length of Sequence = 343 Nucleotides)

CAATATATTAA AATCTATTTT GTAGCTGGAC TTCACCTACA ATGTAACAGA ACATTGAATA TTAGATTCTG AGCATATTCA
 TGCAAACTTC CACTTTGGTG AAGTGATGA CAGTGGAGTT CTGGAAGACA ATTTTCCTTG TAAACACCAA GTTTTGCACT
 TTGGACTATG CTCTCAAGAT AGAAACCTAC GTGAGTGGAA AAAGAAAATG TATAAATGTG AACAAATATT CCTTACCACA
 CAGAATAACC CTGGCAACAA ACAATATCCC CAAGTCCTGG GTNATTCAAT CCTCACCGTG GGCAGGAAGG GTGAAGGAGG
 CTGCACCTGG GNCACAGCCT TTT

SEQ ID NO:1596: (Length of Sequence = 373 Nucleotides)

TAGTCAGTTA TTGCTGCACT AGAGCTAAAT AAAAGACATA AATATCTAAG GCACCTACTG GAATAAACAT CTTATTTCCG
 CTAAGAGGTT GGCTAGGGAA GCTCTGCTTC AGAGTATGGG TTGAGTATAA GCCTGTNCCA CATGCTTTT GCTCTGGGAC
 CAGGAGTTGT GCAGCCCATC CTTTCTCAA GACAAAAGCT GAGCCAAGCA AGGACATTAA AAGCTTCACT TCTGCTCACA
 TCATATCTAT TGGNCAACA TTCCATTGGG CCAAAGCAAA TCACATGGGC CAAGTCAAGC ATCAGTAGGT CTGGGGGAAT
 ATTCTTCTCT CTAATCTTGG ACACATGGGA AAGGGTTATG CATACTAATT CTT

SEQ ID NO:1597: (Length of Sequence = 276 Nucleotides)

GATTGTCCAT ACTTGATTAT TAGTTCTTAA AGAAAGTATT CTTAATTCCA AGCCTAATAG CTCTTATGTC ATTAGTTTCT
 AGTGCAGAGA AATGTACTTG ATGAATTTTT GTTGACTTTT TTTTGTGCTA GCCAATATGA AGGTGCCCAG TCCCTGCCAA
 AATCAGCACT AAACTATTT TNCATGAGTA ATAACAATA TATTCTTTT TAAATAGCAC CTTTAACCCA AAAATCTTAA
 GCCATATATA ACATTCACTC AACANTACAC TCAAAA

SEQ ID NO:1598: (Length of Sequence = 355 Nucleotides)

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AAATACTGAT TTCAGACCTT CTGCTCTAG AAGTCAAAAT ACTTTCCCCC TGACAAGAGG TAAGATAAGG TAGAAAATAG
 AAACACTGGA AGAGAGATCT GGACTCCTAA AGCTGTGATG CCATAGTGTA GTGGGGGGGG GTGCGTGAGG AAGTCAGGAA
 TGCCGCAATG TTAAGGGGAA AGGGAAGATG GAGCAAAGTG AGTCCCAGGG CCAGCAGGGG GCCAGCCTTN TTTGACAGGG
 GCAGGGGAGA AAAGGCCAGA CTCCCATAC ACATGCTAGA GGGGAGGGCT AGTGTGAAG GGTAAATAGT TGAAGGAGTC
 CACGGGCT

SEQ ID NO:1586: (Length of Sequence = 256 Nucleotides)

GGACTATCTG TATGGCAGAC TCATCAACTT TGAGAAGAGG AGGAAGGAGT TOGAGGTGAT CGCCAGATC AAGCTGCTGC
 AGTCGGCCTG CAACAACTAC AGCATTGCGC CAGATGAGCA ATTTGGGGCC TGGTTCCGGG CGGTGGAGCG CTCAGCGAGA
 CYNAGAGCTA CAACCTGTG TGCGAGCTGG AGCCCCATC CGAGTCAGCC AGCAACACCC TCAGGACCAA GAAGAACACA
 GCCATTNTCA AGCGCT

SEQ ID NO:1587: (Length of Sequence = 371 Nucleotides)

GGATTCTACA GGCATAGACT TACACGAGTT TCTGATTAA ACATTAAAGA ATAATCCAG GGACAGGATG ATACTTTTGA
 AAATGGAGCA GGAAATTATT GATTTCATTG CTGACAACAA TAATCATTAT AAAAAGTTCC CTCAGATGC ATCGTATCAG
 AGGATGCTTG TCCATCGAGT GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGNAAATCTG TTATCATCAA
 CAAGNCCAGC AGCACCAGAA TTTTACCAGC CAGTCTTGTC TNGTCAACAG GGGNTCCAA GGGCTAATAG GAGTNCAGCA
 GCCCACCTCA GAGTCAGACG TGGTTAAATN ACCCCCAAGG GACTCCGGTG C

SEQ ID NO:1588: (Length of Sequence = 314 Nucleotides)

CACACAGGAT TCCATAATAC TCCTGCTGIG TTCTGAATAT TTGFACTTCA CATGGGATTA CTGAACACTA CTACGAGATT
 CTGAATGTTT GINGCTCACA TAGGATTCCA AAATGCCCCT GCTGTGTTCT GTTGTGCCCT CACATAGGGT CACTGCTGCT
 GGGTCTCTAG TGTTCTCTAC TCACATAGAA TTCAGNACA CTGCGAAGAA TTTCTGAATG GTTTCTGTGA ACATAGTATT
 CCAGCACACT CTCGCTGTTG TTTGAATGTT TGTCCTCAC ATAGGATTCC AGAACACTTC TGCTGATGTC TTGA

SEQ ID NO:1589: (Length of Sequence = 256 Nucleotides)

GACGAGGCAC CATGCGTGAN ATCGTGACA TCCAGGNGGG CCANINCGGC AACCAGATCG GNGCCAAGTT TTGGGAGGTC
 ATCAGTGATG AGCATGGGAT TGACCCCACT GGCAGTTACC ATGGAGACAG TGATTTCAG CTNGAGAGAN TCAATGTTTA
 CTACAATGAA GCCACTGGTA ACAAATATGT TCCCTGGGCC ATCCTCGTGG ATCTGGAGCC AGGCACGATG GATTCTGTTA
 GGTCTINGACC ATTCCG

SEQ ID NO:1590: (Length of Sequence = 313 Nucleotides)

GGCAACAAGC CAAGTAGCAA AGATATAAGC AACAATCAA TGGAGCCTGA AATATGATAA GAGCATACAT GCACTTTAAC
 AATAATTTTG ATACTGGAAT GATTATTTCA GAAGCAATAT TTTINCTGAA AAGCAITGGT CTCTGTACA GAAAATAAAA
 AAAGTGAGCT GCCACTCATA GTGAATTAG AGCTGTGGGC TGAAAGGGTC TCTTTTATAG CCAGTTTGAA ATTTTTCATA
 TAATAAAAAC AGTATGTAAA TATTATATAT ATATACACAC ATACATATAT ATGCATATAT GTACATATTT CTG

SEQ ID NO:1591: (Length of Sequence = 296 Nucleotides)

TTTINAGTCTC CGGCCCTACA ATTACGCGAC TGCGCTCGG CCAAGGCCAG GGGAGACCTG GGTGCCTTCA GCAAAGGTCA
 GATGAGAAG CCATTGGAAG ACCCCTGGIT TGCGGGCGG ACGGGGAGA TGAGCGGAC AGTGTTCAG GATTCCGGCA
 TCCACGTCTT TGTCGCAAG GAGTAGGATT NGGGGCCAG GCCTGGCCTC GGGGTTCCTC CGCTGCCTGC TGGCCAGTGG
 CNGAACCCCC CANINCCCTGC CACTNTCACA CAGTATTTAT TGTTACCAA ATGGCT

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TTGGTCTCA AGTCCTATTT TAAAATTTTG TCAATTAGAG GACTCTTGGT TCTCTTGGT GACTCATTCT CTGCTGATTT
 GTTCTCTGTA CTTGCAGCAA ATAAAGTGCA GTCATTGAGA ATGNCCTGT GTCAGTGTGA TGTATCAAGG GATCTTCATG
 TTAATATCTG TTTCTCTGAC AACTGTGTTT TATACTTTGT ACTGTAGCTT TCATTGGAGA AGCCCTGGGC TCATAAGAGT
 GATTGTGTTG GGCATTTCTT TATGGAACAT AAGCTTTTGA AATATACTTG AGGTAAATAT TCATGGGAGA CATCCAAATG
 CAGTAATGAG AGTACAATGA AGACAGCATT TTNGACTTTG GAAACCTGAG TTCAA

SEQ ID NO:1580: (Length of Sequence = 325 Nucleotides)

TCINCTGATG CACCCATGAG AGGGGAGACA GCACTGTCTG CTCTCGCAGT TTTCCCTTAA CACTCCCTTA TCTGCAGACT
 TAAACTAGGA GCCCCTGGCA GAGTCCTACC TCCAGAATCA CAAAAGTGTA GAAGGAAAGT GAGAGACATT GATTGACTTT
 ATATCTGACT TACTAGTTTC CTAAGGCAGA GATTTTTTAG AAAACTGCCT GGCTGGCCC AGCCAGGAT AGATAGGGAT
 GGGTAAGAAG CCCTTINAGAA TGTGGCAGTA TGTGGCTTNG ACTTCAGACT TGTGAGATTA GGGGTTTTAT AGGGGTTTTT
 TTAGC

SEQ ID NO:1581: (Length of Sequence = 402 Nucleotides)

GCAGATCAAG AAAAAGTTTC AGCCAATGAA CAAGATCGAG AGGAGCATAC TACATGATGT GGTGGAAGTG GCTGGCCTGA
 CATCTTCTC CTTTGGGGAA GATGATGACT GTGCTATGT CATGNTCTTC AAAAAGGAGT TTGCACCTC AGATGAAGAG
 CTAGACTCTT ACOGTCGTGG AGAGGAATGG GACCCCGAGA AGGCTGAGGA GAAGCGGAAG TTGAAAGGAG CTGGCCCGA
 GGCAAGAGGA GGAGGCAGCC CAGCAGGGGC CTGTGGTGGT GAGCCCTGCC AGCGACTACA AGGACAAGTN CAGCCACCTC
 ATCGCAAGG GAGCAGCCAA AGACGGAGNC CACATTCTAC AAGGCCAATA AAGACCTACG GCTTTTTTCC CNTGGCCAAT
 AA

SEQ ID NO:1582: (Length of Sequence = 286 Nucleotides)

TCTTAGTTGA TTAACAACAA TAATTGAAT AAAAATTAT GTTATNCTT ACATGTATGC CATGTAGCAC TTAAGGAGA
 TGAGTTTATG AAATTCATGA ATGAGAGGAT GATGTAAGTT TAAAATCAT TATTTAGTT GCTTTATTCT NCTATTTTAA
 ATTCAATAAT AACACAGGTG GCTGTATTT TGAAGAGGC CCTTCTCTCC ATTTGANCIT TATAAACT GAGGCAGTAG
 GGTAAATA TTATCTCCAC TTTATATTG AAGGAAATGG GGGCA

SEQ ID NO:1583: (Length of Sequence = 323 Nucleotides)

CTAATTTTG TATTTTGTAGT AGAGATGGG TTTCAACATG TTGGCCAGAC TGGTCTCAA CTCCTGACCT CAGGTGATCC
 GCCTGCCTTG GCCTCCCAA GIGCCAGNT TATAGGCATG AGCCACCAG CCTGGCCTTC CAGTTGTGAC CTGTTAGGA
 TACTGCTTTA ATTCATTTT CCATTGAAAA TAAGCATGAA AATACTGTG CAGTCATAAT TGTGGTATTT NCTGTNAAGG
 AAAGTGGCAG GGCTCTGAGT GTTATCGGG AGACCTAACC CAGTNCAGA GGGGAAGTCA GAAGGCTTAC TNCCCAATGG
 GGG

SEQ ID NO:1584: (Length of Sequence = 301 Nucleotides)

AAATACTTGT AAATCACITT ATGTTTCTGA GTAAGGAAGT AATGAAACAT ACGTACAAGT AATCAGTAAG ACTTGTTAGA
 CAGCTGTTGT TCAGGATGCC TTTAAAAGGG CTGTAATGC AGTTACATTC TAACAGAGAA GTCCAACTA CAGGTAAGAA
 CTACGGCTTG TACTGTGAAA AATGTGCAGC TTTTCAGTTA TAAACTAGT TGAACACTGG TTTACAAGGT AATCCGTAGG
 AACAGAGAGA CTGTAGGAAA ATATTCCAGC ACTTTGAGTT GTGTTTTGGC AGCAGCATTT G

SEQ ID NO:1585: (Length of Sequence = 328 Nucleotides)

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GATAGGAAAC AACAAATGIGT TCAGTCAAGC TGTCAGAAC CAGNCCACGG CTGCACAGCC AGNGTATAC AACAACTGA
GCATCACCGT TTTCCAT

SEQ ID NO:1573: (Length of Sequence = 368 Nucleotides)

CAAATAAGTT AGAAACATGA AAAATTCTTA GAACCTTAGA TGAAAAATTA AATTACTAC TAATACCCAC CTGCAATAAT
TTCCCGTAGT TTGGGATCTA GGTTCACAGT GCATGGCAA AAGACTTTTA CATCTCGAGC CACAAGAACT GGGGTCCITG
AAGACAAAA CACTTCAAAA TTTCTTATAT CTCATCAAT TTCAAGAAGT GGCTCAACAT CCTTAGITGT TGAATATTC
TTTGATATTC TTTCTAGAT GTTTTTTAAT GTCATTGAT CTGGAATACC TTCAGTCTCT TCCAAATATA ATATGAGNCA
TGAAGTCCGG TATGGCCACT GTCAGTAAG GTTGATCCCG CTAGCAAG

SEQ ID NO:1574: (Length of Sequence = 397 Nucleotides)

AATTTAAGC AAATGTTATG TTTAAAGACT GTTTTGATGA AAACCTTTAG AATTGAGTTA GTAGCAGAAT ACATAGCTAA
ATGTACTTIN CTACAAATAG AATGAGATAT TTGATTTAAA ATATTNCTTT CCTCTTGAAA TAGGATGTTA GATAGGGACA
TCTCATTTTA CCIATCAAGT TCTGAGTCTT GCTTTAGAAC TACTTCTTTT AACTTAATTN CATGCATACA CTGGAAGACA
ATAATATGGC TTTTAACTG CATTATCTTT AGTTGAACT GATGGAGAAA CAAAATACT GCTTATACCA TATGGGTAC
ATGCTGAATG TTTTAAAGA CTAGCCAAA CTGACATTTT TAAAATTAA ATAAGATGTT TTAGTTTCAA ATTAGAG

SEQ ID NO:1575: (Length of Sequence = 296 Nucleotides)

GGACTCAGCC TTCCGCGGCA TCTGCATGAT GATCGGTGTC AACCCGGGGG GCGTGTGCA GGTGGGGCA GCTGGGCTCT
NAGGCGAGGC GCGGGCNCIG GGCTCGGGCG GCCCCTCACC TGGGATCCGT CACGTTTCAG GACTTTATTT TCTTCTCAA
TGNTGTAGCC TCCTGGGTGA GCCCGAAGAT NACCTTCGGG ACATGTTTTA TAAGGTGAGG CTCTGTCTGG GCCCTGATCT
AGTTCCGGGA GCAGGCAGGA NGTGAGACCA TCTGGTAACA ATNGGGGCTN GGGATT

SEQ ID NO:1576: (Length of Sequence = 289 Nucleotides)

CTTTATGAAG TAGTAATTC TGAGAGGTGT GCTGGCTGAA AACATAATAG GTTCTGGAAG AGCCAGGTAA ATGCCTGENT
TTAGACATGC AGGGGTAAAT CAAAATAATT TAGGAGGTT TTAGCTGGT GAGCCTCATA TGGGATCTTC GAACCGTGG
CGAGAAGAAA ACCGGTGTIT AGGNAGCACC AGGCACAGTG CTCGGAAGGG AGAGGCTNGC CGGCCAGTGT GCAGCTCAGC
TNTTTCGAGG ACGGAACCCG CAGCCTNGCT GTNCCCAGC AGACCCAGG

SEQ ID NO:1577: (Length of Sequence = 320 Nucleotides)

CAGACTCTAC TCAGATTTCC CGCTATGCC CTTAGGACAG AGCTGGAAGG GAAGGAGGCT GGGCCTATTT AGTCATAATG
CCTCCCCACC AGGTCTAGCT TTCATTATC CATGAACCT CACCCAAGGG CCAAGAAGTG AGTTCACTGC ACCCTGGACC
CCTGTGAGG TAGGAGAAGT AGACGTGGG AGCAAGGTTT CTCTCCTAAT TTINTTGCAT CCOCTCAGTG CCCAGCACAG
CTCCGATAC AGGGCAGGTT CACAGTCAGC GTGTCACCT GGGNCTGTGT ATGCACCTAA GGAAAAGNCT CAATTTTCTT

SEQ ID NO:1578: (Length of Sequence = 217 Nucleotides)

AATCAGGAGA ACTGTTAGAG CCATACCAGA GAAAATCACA AGAAAGGCAG GACTGCAAAG NTCTAGTGA GGTGTGAGA
AAAGGTAAAC CCTTCTTAA GTTCATCTGC CCTTTAGTT ACCACTGGCT GTCTCACTOC TGGATTTATG TGACTCCCTT
AGCTATACTT TCCANCCCC CTGGGATGTT CCCCACTCAT CCTATTCACT CACAAAG

SEQ ID NO:1579: (Length of Sequence = 375 Nucleotides)

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GCACTGTGGC TAATTGTAGC TCAAAGATC TGCAGAGCTC CCAGGGGGGA CAGCAGCCTC GGGTGCAATC CTGGAGCCCC
CCAGTGAGGG GTATACCTCA NTTACCATGT GCCAAAGCAT TATACAACTA TGAAGGAAAA GAGCCTGGAG ACCTTAAATT
CAGCAAAGGT GACATCATCA TTTTNCGAAG ACAAGTGGAT GAAAATTGGT ACCATGGGGA AGTCAATGGA ATCCATGGCT
TTTTTCCCCA CCAACTTTGT GCAGATTATT AAACCGTTAC CTCAGCCCCC ANCTCAGTGC AAAGC

SEQ ID NO:1567: (Length of Sequence = 292 Nucleotides)

GATTTCCCTG GGAAGACAA CATCACCAGC AAATGGATGA TTGTCAACTG GGGAGCCATT GACTCTCCAC TTGATTGTGG
GTTGAGGTTT TNCTTCAGCC TCACATAACA AGATGCCATT GCTTCCGGTG CTATACACAG CACTCTGAGG CTTCTTTGTG
CAGCGAGGAG GCTCTTCTAC TATAACGTGA AAATCGTGAG TGGCTGTTCC CAAGAAATTG CTGGCTGTGC AGCGATAATT
TCCTTTGTCC TGGTAGGAGA CATNCTCTAT CTTCAAAGTC TTGCCATAAT TT

SEQ ID NO:1568: (Length of Sequence = 204 Nucleotides)

ACCTACTCAG GAGGCTGAGG CAGGAGAATA GCTTGAACCC AGGAAGCGGA GGTGTCAGTG AGCCGAGGTC ATGCCACTGC
ACTCCAGCAT GGGCAATAGA GCGNGACTCT NTCCCCCGG AAAAAAGAA CAAGGGCTAA NTCAAATCA AATTTTCCCT
GTACCCTAAG AANAATAATT AGGNCGGGAG ATGTTTGACT AAGT

SEQ ID NO:1569: (Length of Sequence = 362 Nucleotides)

CACAAAGCCA AGTACAGAAC CACAGAATGA AGCCGTCACA AATGTTGAAT CCCAAAACAC TAACAGGAAC AACTCGTATT
TCCATTAATC AAGATTTTAG TATACCAAAT TTTCTAGTTT TTATCTCATG GAAATATAAG GGTATTTTAT CTTTGTATG
CTACTGAAGG GNAACATCA TCATACAGCA ATGAATACIT CAAGGNCIT GTTGATCTCT CTATTATTGA CAGTGGGGTG
TTAAAGTCTC CCACTATTAT TGTGTGGNG GCTACANCNC TTTGTAGGGC TCTAAGAAGG TGTTTTATGA ATCTGGGGGC
TCCTCTTTGG GNGCATATAT AATTTAGGT AGTTAGTTCT CC

SEQ ID NO:1570: (Length of Sequence = 262 Nucleotides)

TGCTAAATGA TAGANGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT
GATCTNTGT GGTAGAAGTA AGAAGTGGGG TACCTCTGG AGGAAGAGAA TTINCTTTGA AGTGGCATGA GAGGATTTTT
TTGGCTAATG AAATTATTTT NATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TTTCAAACT CATGGNACCA
TTCATCCAAG TCCTGTGCAT TT

SEQ ID NO:1571: (Length of Sequence = 402 Nucleotides)

TGCTAAATGA TAGAAGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT
GATCTGTTGT GGTAGAAGTA AGAAGTGGGG TACCCNCTGG AGGAAGAGAA TTINCTTTGA AGTGGCATGA GAGGATTTGT
TTGGCTAATG AAATTATTTT TATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TGTCAAACT CATGGAACCA
TTCATCCAAG TCCTGTGCAT TTTACTGTGT GAAAATTATA TCTCGACTTT TTTCAAAAAA GAAAAAATA CTTAATTATA
ATATAGCATT TATGNATTAA AATAATCCCN TTATGTAAAA ATATTTTATT GGNITGGTCA AGATTATGA TTGCAAACCA
CC

SEQ ID NO:1572: (Length of Sequence = 417 Nucleotides)

CTACCAGCCC GTTTTCACAA CTAGCAGCAA ATCCTGAAGC ATCCTTGCC AACCGBACA GCATGGTGAG CAGAGGCATG
ACAGGAAACA TAGGAGGACA GTTTGGCACT GGAATCAATC CTCAGATGCA GCAGAATGIN TTCCAGTATC CAGGAGCAGG
AATGGTTCCC CAAGGTGAGG CCAACTTTGC TCCATCTCTA AGCCCTGGGA GCTCCATGGT GCGATGCCA ATCCCTCCTC
CTCAGAGTTC TCCTCTCCAG CAACTCCAC CTGCCTCCGG GGTATCAGTC ACCAGACATG AAGGCCTGGC AGCAAGGAGC

SEQ ID NO:1560: (Length of Sequence = 383 Nucleotides)

CCAAAGGTAC AACAGATTTA CTACATTAA GACAGGAATC TTTTCTAATC TCTGTGCCTA TTAAAGAAGC CACCTGCTTA
GAAGTACTTT GTAGATGAAA AAATACTTAT GAATCCACTG TAACTTCACA ATCTTGAATG CCAAGGAAAA ACTTTACTAG
TTTCATTTAC CACTATTCIT TAAAGINCIT TTTGATTTTA TGTTTTAAAT TTTTAAATTT TATATTTTGA GACAAGGTCT
TGCTCTGTTG CCCAGGCTGC GGGGCAGTGG CATAAACGTG GCTCACTGTC ACTTTGACCT CCTGGGCTCA AGGAATCCTC
CCATCTTAGN CTCCTGAGCA AACTGGGNCC ACAGGCATGC ACCATCATGN CCAGCTAATT TTT

SEQ ID NO:1561: (Length of Sequence = 313 Nucleotides)

CCCCCTCCAC CGCAGTCGT GCCCCCGTCC CCACCAACCAC CTTCCTCAAC CACTTACAAC TGCCCCAAGT CCCCAACTCC
AAGAGTCTAC GGGACGATTA AGCCTGCGTT CAATCAGAAT TCTGCCGNCA AGGTGTCCCC CGCCACCAGG TCCGACACCG
TGGCCACCAT GATGAGGGAG AAGGGGATGT ACTTCAGGAG AGAGCTGGAC CGCTACTCCT TGGACTCTGA AGANCTCTAC
AGTCGGAATT NCGGCCCGAA GNCAACTTTC GNAACAAGAG AGGGCAGATG NCAGAAAACC CATACTCAGA GGT

SEQ ID NO:1562: (Length of Sequence = 320 Nucleotides)

AAACGGGCG CGAACCGCAG TATCATGCTG GCCAAGAAGA TCATCAITTA GGACGGAGGC ACGCCTCAAG GAATAGGTTC
TCCTAGTGTC TATCACGCAG TTATCGTCAT CTTTTTGAG TTTTTGCTT GGGGACTATT GACAGCACCC ACCTTGGTGG
TATTACATGA AACCTTTCCT AAACATACAG TGTGTACAG TTCTAATACA GCAAATTTAA TACAATTTTT TATTAGATCA
AAATTCATA GAATGTTTCA TATGTTTTAA GGAAGGTTCA TTGAATTTCT TCTTTTCAAT GGAAGTCTTC ATTTGGAAAA

SEQ ID NO:1563: (Length of Sequence = 299 Nucleotides)

GCACAAGCAT GACCTGAACC TGTCACCTGC CGINAGTAT TTCACATTC TATAGTTTTT TGTGATTCTG CCTGCATTTA
ATCATCATCA CCAACAAAA TAGTTCCTCT GAAGAATAT TTTATACIAG GATTCTCAGG NTATCTCCTC TCAATCTCTA
TTGGGATCAC TCCACTCTGA CTGTACACT CATTITCCCA CTGATGTAGC TGTCTCAAG TTAGAAGTTA AGTTCTCAGT
CTTCATTTTA TCAGTCATCT CAGCAGCAIT CATTATGGTT CAGGCATCC CTCCTAATT

SEQ ID NO:1564: (Length of Sequence = 325 Nucleotides)

CAGATGNTC AGTTCATACT CTGGCAGTTA ATTTTATTC CTCTAAATAA AAATGGACAG GTTAATTTAT TAAGCAGCTG
TGTTATCAAT ATGGTACGTG TGTGINCTTG TATAGATAGA TGTATATGTA CATACATAAC TATACATTTT NCTGGACACA
TAATATTINA GGIGCCTAIT GTATGCTAGA CACGTCTCTA CCATCAGTAA AAAAGCACIG CCCTGTTTTA CTGTTGATTA
AAAACAAAAT TCTGAAAAA GTGANCAATG AGGCTTACAA CATTGTGTAC AGGNTAAGGN ATCTCAATTT AGGAAAATGT
TGTC

SEQ ID NO:1565: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTA TATTAGTGCC TGCTTTTTAA AAGTTTATTT TACATTTTAA ATACAGTATT TTTCTCATAA AAAAAAATC
CAGGAAGTGC CTAATCCAT GGTTCCTATA CCATATGTAC ATGAAAGCTG ACAGAGAGCC TGACAAATGT TCTGGATGTA
ACAGTATGAA CACCTATGAG CTGGGACTAC TTCTGANICA AAATTAAAAA ACACAAATTA AGCACTGCTT AAGAAAAAA
AAATCCAGTT TCTGAACAAC CAAAAGAGAA CAGAGTTAGA TATGTACAAA ACCAGGTATT AAAAANCAGN AAGGAATACA
GCACACAAAA ACTCAAACAN CCCATATGTA GTGAAGTGA TATACTGCAG TTAATGAAAA CC

SEQ ID NO:1566: (Length of Sequence = 305 Nucleotides)

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CCCTTGTCAC ACAGCCATTT AAAAATCTTC TGAAGGGCCT CAGGGCACAA AGTGATCATT TGGGATCCTA AGTTAAAAAG
 GAAATGCAAG AGTAGENTAC TCCAATTCCA GAGTCTTTGC AGGAGGCTAA TCCCACAAGA AGGGTAGCAT CAGAGAAGTG
 GGCATTGGTC TTAGTGGTGG ATCATCAGGT AGACAAGTGA TAGTGTGTGT AACCCATCTG AAATTCATTT TACCGTCACC
 ACTCTTACAA AGGACAGTTT ATTCCCAAGG ACAGTGCTGA CGGGGAGGGG GACAGGCAGG GAGT

SEQ ID NO:1554: (Length of Sequence = 309 Nucleotides)

TGTTTACTG ACCATGTTTT TGAGAGTAGT GCCCCTAACC ACTTTGTCTC CACTTGCATA GTGTAGTGAT TTTNAGNCT
 CTGTATGTCA TATTATAACA GAACTGACTG TATATGGCTA TTTTATCCCA TAATCAAGCC AATTCTTCCA GAATATTACC
 ATCAGTATTA CCACATACAT CCTCCCAAT CTTATTTCAA AGAATAAATA TATAGTCACT CATGGTTTTT AAGNAAACCC
 AAAACTACTC AACCAAAACC TTGAGGAAGG TTTTCCAGG GNTTCTACC TTAATTATTC ATAATGATT

SEQ ID NO:1555: (Length of Sequence = 326 Nucleotides)

GTTTAAAAAC TGTCCAAATG TCATTTTAAT TTATGAAGGC ACCCAGAATA AGTNCATATC TCATCTGACC CCAATATATT
 TNCCTGAAGCC AATTCTCTCT TTTATTAAIT TTTACTGAAA ATAGCACTTT TTTCTCCCC CTGATAGTAC TGGGTAATGT
 TAGAATGTCC TCTAAAATTC TTGGACCTT ATTTACATTC TCAAGAGNTT TTTTAAATTT TACCAATAAG ATGTGCTATT
 TGAGGAATTA GACTTTAGTT CAGTTGTACA TGGNTATGT CTGCTCATAT CATTCATGTC TGAGNCTTTC ATTTTATTAA
 TATGGG

SEQ ID NO:1556: (Length of Sequence = 375 Nucleotides)

CCCATCCCTG TTTAGGTGCT TTGTCTCCT TGAGGAGCCT CCAATGCTGC TGCTCTATA CATGTCACAA TTTCAGACCC
 AGCATGCTAG GAACTGCTGC CAGCGCCTGG TTAAGCCAAT ACTAAATGGG GCCAAACAGG TGAACAGACA TTCTGTCTTT
 CTCCAAACCT CTGAAAAAGA TTCTGCAACT CATCTCACAG TAATTTGTTC CCTAATTTAC TCTTAGGAAA TTGTCTTAA
 AGTCTGATTA GGTAAAGTCC AATTCCCTGT AATTAGGATC CTCAGTGAAG AAAAATCTAC CCATCACCAC AATTTATTTT
 CTTTCTTATA GCTCCAGCAT CAGTAATTGT ACCAATTATTT TTGGCAGCTC TGGGG

SEQ ID NO:1557: (Length of Sequence = 306 Nucleotides)

AATTCGGAAG ACTATTCCTA TACATTAGAG TGAATTINAG ACTATCTCCA TCATTCTCCA GCCATTCTTC AGTGGGAAAA
 AAACGGTGGG ATTAACTAG TGGAAACAAG GCTTCTCAT CTAGTCCCAA TCCAGTCGAT AAGCTGTGTT TNCCAATCAC
 TGCTCCAGCA CAATGGCCCT CAGTTTATTT TTAAGTCTAT GGCATGCCCTG AAGGACCATG TTCCCATGAG TGACACCCTT
 CTGTAAATGT GGTGGCAGAT TATGGGCTGC TGTTTTAGAA GGGACTGNCA ACTTGCTGGG GGTAT

SEQ ID NO:1558: (Length of Sequence = 292 Nucleotides)

AATTCCTCCT TTCCAAATGT ATTTTCAATC CCTTGAGTGT CTAGGCTTCC TGCTTTTAAG GCCTNCCTTC TAACCCAGGG
 TTGCCCCATT CACCTTAAAA CATTTTTCAA TAACCCAGAA AAAACCAGG TGAACATACC CAAGCTCCGG AACCAGCAAA
 TTTTGTTCGA ACCCCGCTGA TGAATCCAG GGAAGCCAA GAGGACAAAG ACAAGGATGA GGACGAGGAC CCAGGGACCG
 NTGGTGAATG GCAACTGCTG TCAACTTCAC TTTTCAACCT CAGNCAGTTT GT

SEQ ID NO:1559: (Length of Sequence = 246 Nucleotides)

GTGGTCCGTT CTCAGCCCAA CAAGAGTGAT CCTTTTAAAG TCCACACAG CTGCCTCTCC TTCTCCGCA TGAGCCTCTG
 GCATGGTCTT TCCTCCAGCT GGGCCGGGG TGGGCAGAGC CTCTCTCTGC CGGGGCCCTT GCCCACCCTT TCCTTTGCTT
 GGAGTNAAGG TGTTCATACC AAAGACGGAA CCATTTCCGC TTTAAAGAAA ATATATNCAG AAGCAGCCGC TGCTCTGNAG
 CCTGG

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GGAGGCTGAG GTGGGAGGNT CACTTGAGCC TGGGAGGTTG AGGCTGCAGT GAGCTGTGAC TGCACCACTA TACTACAGCC
 TGGGAGACAG AGTGAGACCC TGTCATAT ATATATATAT ATATGTATGT ATATATATGT ATGTATATAT ATCTCTAATA
 TATTAATATA TATCTAATAA ATGTATCTTA TATATAATAA ATATATCTAA TATATAATAT ATATATINCC NAGAGAGGGA
 GAGGCTCTTA GGAAATTATC TTCTGCATA TTATGTTATA TTATGCTATA TTGGCTATT TCCTAAGAGC TCTATOGTAT
 TATTTCCATT TATTTGIGAG GA

SEQ ID NO:1548: (Length of Sequence = 334 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCOGGGT
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGAAGT GGTATCCAGA
 TAGGTTATCC TTGGAGAGTA TCNGGGATG TCTCTTTTCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTTGAGGAA TTCACGTAAG GNATGATAAT CTGAATTTTC AGGGCTAGGC
 TCAGAAGCAG GAAT

SEQ ID NO:1549: (Length of Sequence = 362 Nucleotides)

AGGATTCTGG GGGCTTAGAG AGGGCAGCCT GGAGAAGCCA GAGTTAAGCT CAGAACAAGA GGTGCAGGAA GAGCCACAGC
 AGGGAAGGGA AGAGAGATCC CAGAGGAGGG GCAGAGINTG GCAGGACAAG GGCCCTGCCG TACATGCTAT GCATGAAGGA
 AAATCTTGAG ACTAAGACTC ATGAAAAGNT CAAAATAAT TATTTGCTGT GGGCCCTAGA AGACTNAAGA GACATTINCT
 TCGCCATTG CCCAGGGCTG CCTGGGCAGG AGACAAAGGA ATNAAAAGTC CAGGGGGAAA GCAAAAATCT ATGGGCTTCT
 GAACACATGC TTCCCGGAGC TCGTCINCAC AGCATCTTCA CC

SEQ ID NO:1550: (Length of Sequence = 328 Nucleotides)

GGACTAATTA ACTAAGAGG TTTGTACAG CAAAAGAAAC TGTCACAGA GTAAACAGAC CTACAGAATG GGAGAAAATA
 TTCACAACT ATGCACCCAA CAAAGCTCTA ATATCCAGAA TCTATAAGAA ACTTAAACCA TTGAACAACC AAAAAACAA
 CAACCCATT AAAAGTGGAC AAAAGTCATG AACTGACACT TCTCAAAAAA AAGACATACA AGCAGCCAAC AAGCATATAA
 AAAATGCTTG ATATCATTA TATCAGATG AATGCAAATC AAAACCACCC AAGTCTTTT CTCTGTCTA GGNIAATTIA
 TTTTAGGG

SEQ ID NO:1551: (Length of Sequence = 365 Nucleotides)

CAGGAATTTA CATGGGGAGA OCTACCTATG GCAGCTCTCG CGTCGGGAT TACTATGACA GAGGATATGA TCGGGCTAT
 GATGATCGGG ACTACTATAG CAGATCATAC AGAGGAGGAG GTGGAGGAGG AGGAGGATGG AGAGCTGCCC AAGACAGGGA
 TCAGATTTAT AGAAGGCGGT CACCTTCTCC TTACTATAGT CGTGGAGGAT ACAGATCAG TTCCAGATCT CGATCATACT
 CACCTCGTGG CTATTAAAGC ATGAAGACTT TCTGAAACCT GCCCTAGAGC TGGGATATTG TTTGTGGGGC AATATTTTIN
 ATTGTCTCTT GTTTAAAAAG TGAACAGTGC CTAGTGAAGT TAGGT

SEQ ID NO:1552: (Length of Sequence = 330 Nucleotides)

GATCCAAAAA AATTTACTGA AATAGCAAAA ACGTGGACTT TGGGATTTCC TCTAACTGCT GCAAATTTATA ACACAGAATT
 GCTCAGTGT AATACTTGAN TTGTGGGGCC AAGTCTTCTG GCTGCCCTAG TTCTTTTTTC TGGCATTTGA AAGCCCTTGA
 GCTAGCTATG GAGCTAATCT TTGGACAGGC TTTTGGTTC CCAGGAATGT CATGCCTTTG AATTTCCAAT CTATATATAT
 ACAGTGTGTG TGTATGTATA NCTGTCTTT CACTGTAAGG CACCTNCACC CATCCCTTAT AGAAGGNGGC CACAAACAAT
 CAAGCAAATG

SEQ ID NO:1553: (Length of Sequence = 304 Nucleotides)

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GTGATGTTAT ATCAGGTAAA ACCTGTCIAA GGAGAATAGA CAGTAGTTAG TTCAACTTAC TCATTACGTA TTAGGAAGAT
 TAACCTGGTT ATCATTGTTT TATACATATA TATATGNAAT ATATATGAGT ATTCTGTATAA ATATAATACT TTTACCTTGT
 TTATGTATTT ACTCAATATT CTCCTTTTCC TCTAAAATAA TCTGAAGTGA CTATTATCAA TAAGTTTACT ATGCCAAAAT
 TCATTAAATTG CCTTTCACCT AACCTTTGGG GCCATAATAA ATAATAAAAT GTATTGCCAT AACATTAATA AACTACCTTA
 CAAAACCACC AATTAAAATC AAACAACCAA AAAGGTGTTA TTTACATCTG NNCACATAAA TCTACTAAAA ATACAGGGTT
 CAT

SEQ ID NO:1542: (Length of Sequence = 333 Nucleotides)

CTGGTACATG ANTTTATAAA AACATGTCAC GCCCGGCTCT GTGGCTCATG CCTGTAATCC CAGCACTTIG GAAGGCCGAG
 GCGGGCGGNT CACAAGGTCA GGAGATCGAG ACCATCCTGG CTAAACGGT GAAACCCGTC TCTACTAAAA ATACAAAAAA
 TTAGCCGGGC GTGGTGGTGG GCGCCTGTAG TCCAGCTAC TCTGAAGCT GAGGCAGGAG AATGGCATGA ACCNGAAGG
 CGGAGTTTTT AGTGAGCAGA GATCATGCCA CTGCACTNCA GCCTGGGTGA CAGAGCAGAG CGGGGACTCC GGAGCAATGG
 GNAGTACAAT CCT

SEQ ID NO:1543: (Length of Sequence = 329 Nucleotides)

CCCCTGATAA ACCTATCAGA TTCTGTGAGA CTTATTTCATT GTCAATTAAGA ATAGCAGGGG AAAGACTGGC CCCCATGATT
 CAATTACCTC CCCCTGCATC CTCCACCAA CATGTGGGAA TTGTGGGAGA TACAATTCAA GTTGAAATTT GGGAGGCGGC
 ACAGCTGAAC CATATCAGTC TGTATTATCT CTCCTTTTTT CTGCTTTAAG NGAATATACG NAGGTGTGTG TTTACGGNT
 TATACATAGG TATTCTGAAA GATGGGGTTA TTTTCTGTT CANACTTTGA CTAAGTGGCT TCTTTGTGCC CCTATGTGCC
 AGAATAGCC

SEQ ID NO:1544: (Length of Sequence = 313 Nucleotides)

CGGAGATCCG TGATGTAACA AGGATTGANC GAATCGGTGC CCACTCCCAC ATCCGGGGAC TGGGGCTGGA CGATGCCTTG
 GAGCCTCGGC AGGCTTCGCA AGGCATGGTG GGTCACTGG CGGCACGGCG GGCGGCTGGC GTGGTGCTGG AGATGATCCG
 GGAAGGGAAG ATTGCCGGTC GGGCAGTCCT TATTGTGGC CAGCCGGGCA CGGGGAAGAC GGCCATCGCC ATGGGCATGG
 CGCAGGCCCT NGGCCCTGAC ACGCCATTCA CAGCCATCGC CGGCAGTAA ATCTTCTCCC TGGAGATGAG CAA

SEQ ID NO:1545: (Length of Sequence = 384 Nucleotides)

CCCAAACCT GGAGCTAAGA ACTTCATCTC ACTTTTGACA CCCAGCCCC CAAAATATGG AAGCCCAGGA GAGCCAGGAG
 AATTTATAGC AGAGGCTTAA AGAGAAAGTT ATGATTGTG TAAAGTAGAG AATAAGGTGA AAAATAAAAC CTGGTACTCT
 GTCTGGAAGT CCTGGAAGTC TCCTTGCCCA ACCTCAACTG GCCTGTGGGC TCCTGTNTCC TTGCTCTGGG ATGCCATGGT
 GAATGTGAAA ACAGGGGAGG TTGTGTGTGG GGGTGGGAAT GGCCINTCGG TTGCAAGGCG AGTCCTTTGC TGAGCCCAGC
 CTGAGACCCA GCTTATGGGC TTTATCCAGG TGAGAAAATN CTGGGGACAT GTGTTGAGG TTTA

SEQ ID NO:1546: (Length of Sequence = 345 Nucleotides)

TTTAAAGAAC AATGATTAAAG TGAAAATNCT CTCAGTTTTT TTTAATTGGT TCAGCAATTG ATTAATTACT GAATCTTGAC
 CCTAACTTT TTAGTCTAGA AATGTGCTTG AGGAATACAG GCTGGAGATC AGCTTTTGA CATGTCATTC CCTCCTGNN
 TCACATCCAT GTTGAATCA ATTTATAAAC TGCCCTCCTA AGGCTTAAAA TGATGGTGAT CTACAGACAA GTGCCCTCCT
 AGGCACAGG TTGCTGGAGA CTGATGCCAG GCCCATGGCT CTAAAGGGA ACCTGAACT CATGGCAGAA ATGGTGGAAA
 GTAGAGAAAT GAATAGAGGG GGGAA

SEQ ID NO:1547: (Length of Sequence = 342 Nucleotides)

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AATTGGGAGT CCTGTACTGT CTTAGGGTA TGCAAAGAGG CTCCTCTTT TCTAGGTGTT CATCAGTACA ATATGAC

SEQ ID NO:1535: (Length of Sequence = 323 Nucleotides)

ATATTACATT GATGTCAGTC TTAAAGATG GAGTAGGACT TINCAGGCAG CAACGAAAGG GAAGGACATT TCAGAAGCAG
AAATACCAAT TGTTAAGGGA TGACAGCCAA GAAATATTAA AGCATATTTG GAAAGTATTG AAAATCTCTG TGTGGCTAGA
ACTTTAGATG AAGAATCAGA TACATCTGGA GAAGGAGATT NAACCNGATG ATCATAAAGA ACATTTTATT TAGGCCATGG
TAAGGCTTGG GCACINTGGA GOCATGAAG GTTTTGGAC AAGGGAGTTT CCTTAGGGAG GAGTAINAAG CCATAAACCA
AAT

SEQ ID NO:1536: (Length of Sequence = 305 Nucleotides)

AACCACATTT TTAGTCATC TNCCTCCGC TGGATTCCAA CATGCTGGCC CGGAGCGTGG CTGGCTGGAA GCAACTCCAA
CAGGTTTTTC CCTTCCCGT CATGTACATT ATTTATTTT GATCCTACTC ACTGTCCCAA GTCCAGAGGC AGTTACAAA
AACACTCTG ATGCAAACG TGAGTGGCTA CAACACCGG ATGGGGTGG GCGCGATTCC CACAACAGGG AGTGAATCC
GGGGAAGATG ATATATAGGG GCAAGACGGC CCCTTACTTT GCTAAGAGTA TATGGGAGCT CAAA

SEQ ID NO:1537: (Length of Sequence = 279 Nucleotides)

GGTGGCAGCG GCGGCGCGG GACTGAAGCG CGGAAAAGC TGAGGCGCA ACGTCGGGA CGGCTGCNCG GGACGGCTCT
GTAGGAAGGA ACTTGGTTC CCTCCCTCA GCTTCGCCC CAAAAGATTC AGAATGGACA GTTTAGAAGA ACCTCAGAA
AAAGTCTTA AGGCTCGAAA AACGATGAGA GTNAGINATC GTCAGCAACT TGAAGCAGTG TACAAGGTCA AAGAAGAACT
NTTGAAACT TGATGTCAAG CTGTTAAATN GCAACCATG

SEQ ID NO:1538: (Length of Sequence = 310 Nucleotides)

ATATTTCTT CTGCTGAC TCGGAAGAA CTGCACTGT TGCCTAGGCT GATAATCCCC GAAAAAAGT AACAAATGCA
ATINTACCCC CCACCCCAT ATACAGCCCT CATATATATA TATGAGAGAG AGAGAGGAAA AGATCATGAG ACATGCTTC
TAGGGAAAAA AAATCTAAC TTCCCTAGCC ACTGTAGTCA TTTGAAACCT GAGTTAGACT ATGAGTTAGG AAGTATTTTC
ATAGAGTCA ATTAATATAT TTCTGCTCTA TGCATGGATG CTAACAGGTT TAAGGAAACA CAAAAGCCAA

SEQ ID NO:1539: (Length of Sequence = 267 Nucleotides)

GAGATTTTAC TTTGTAATCG AGTAATTTAG CCACACTCTT GTGAGGGAAC AAGCCAGAGC CAGGACCGCA TATTACCGG
TAAAGCTGCA GAGAAGACTT GAGACTTGTA AGATTGGNCC NGGCTGCAGT CCGTGGTCA GTAACATCTG CAACATTATA
CAGCCAGCAG ATCAGCTCTT CCAGCTGACA GCAAAATGTC TTCACACATT GCACCAGTGA TTCTTTTCCC TGINCTCTC
CTTCTCTGGG GAAGCTGCCC TTNAACA

SEQ ID NO:1540: (Length of Sequence = 354 Nucleotides)

ATTTATTTCAG ATGAAAAAA ATCAAGGCTT AATTTAAGTA ACTTGTCCTAA GTTCAAGGAG TTGACAAGTG GCTGAGCTGG
AGTTCAGCAT CTCAGACATC TTCTTTGAA TCCTTGCCCTT CCTTGTAAT TTGAGATGAC GGAGCATGAC GGCTGCATGA
TTATGGGGTC ACCGGGCTG TCCTGGGCCT GAGGGACCAA GGATCAGAAA GGGCAAGAAC CAACTCGNTC AGCTAGTGAA
AGTGCAATTG GACANTGATC CTGTTCCGG GNTTAACCTT CCGCTTGGCC TTTAAGAGGG NTCTTGAAA TGCACCAAGG
GGCCTAGAG GAAGCAAGCA AACTNCTTGG ACCT

SEQ ID NO:1541: (Length of Sequence = 403 Nucleotides)

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ATCTAGACTC CCTTGTGCCC TCACTATGCC AGCGGAAC TGATCATAG CCAAAGAATT TGTGAAGTTT GGGCTTGCAA
CTTGGATGAA GAGATGAAGA AAATTTCGTC AGTTATCCGA AAATATAATT ACGTTGCTAT GGACACCGAG TTCCAGGTG
TGGTTGCAAG ACCCATGGA GAATTCAGGA GCAATNCTGA CTATCAATAC CAACTATTTT GGTGTAATGT AGACTTGTTA
AAGAT

SEQ ID NO:1529: (Length of Sequence = 241 Nucleotides)

GAAGGAGAAA CACTTCTGTC CTCCATAATT CAGACAGTAA ACTGATCGCT GAGATTGAAG TTTGCTTGTT TCCTGGGGAA
GCTTNAAGAT CCTCGTGGGA CCACCATCCC CTGCTCAGTC CTCCCTGGAA GGGGGCACTG GCTGGGTATG AGCCGCGTCA
CCGTTGGGTT TGTAACTTIN TGGATGGTGC CTGENTTCA CCTGGGGCTG GCTGAGGAAA GGGGAGGCGG TAGGNGTCTG
C

SEQ ID NO:1530: (Length of Sequence = 356 Nucleotides)

GGTCTCATGC AAGGGTTTCC CATGCCGTGA AGTGTGTTTG TAATCCACA TGTATCAGGT GCCTGGCTGC TCTGGGACTT
GCAGTAATTG TCTCTGTTT GTTTCAGGTG TGATCCCTG GGGCGTTTG TTGTCGGGG AGAAGACTTA GACCCTTTTG
GGTGAGTACT GCTGGGGAGG TGGCAGCAAC ACAACTTGCT TTTNIGGCTT TINAGCCCCA GCTCATCTTC TAATTINAGA
GTTTTCGGTC AGTCTCTTCC TTTGGNGTIN GAGGAGGCAG TTGTTTGCTG AGCAGCTGAG AAAGCACTGC CACATACGCT
GGCCCTCCA CACCTAGAGC GGTGCAGGAG AGCACT

SEQ ID NO:1531: (Length of Sequence = 379 Nucleotides)

CCAACAGATG CTGCTACGTT TCCTTCAAAA TTGTTAAACA TCTCTTGGG AAGAAGCTGC TTAGTTATAT CCAGCGATTG
GTTCAAATCC ACGTTGATAC AATGAAGGGT GGGGTATCTA GCAGGATGTC TAGTTCACGC ACTGGGTGAA AAACAACCGA
AGCTGCAGAT AAGTGAACGA GATGTTCTCT GTGTTTCAGAT TGCTGGACTT TGTCTATGTC TCGGTCATGG GCCATTTTCT
CACATGTTTG ATGGACGATT TTATTCCACT TGCTGCGCCG GAGGTGAAAT GGACGCATGA ACAAGGCTCA GTTATGATGT
TTGAGCACCT TATTTAATTC TAATGGGATT AAGCCTGTCA TGAACAATA TGGGTCTCA

SEQ ID NO:1532: (Length of Sequence = 307 Nucleotides)

GATAAACTTG AGCCACCAAG AAGTGGACTC TGCCTAGGAA GACAGTTTGC TGAAGTTAGA AAGTACTGGT CTAGGAACCA
GAAAACCTGA TTCTNCCAA GAGTTAGAAT TGINAGINAG TTCTTNTGG TTTTINAGTTT CCTTATCTGT AAAATAATTA
CCGAGTTCAA TTGGATAATC TCTATGATCC CTTCCACATT CTGCATACCT GGATATCTAC TGTTTCTAAA TATTTTGGCA
TTTCTTATAA AGCCCTTCA CATTNCTTT ATTATTTTTC CTCACAAGA ATTCTGAAA TAGGATA

SEQ ID NO:1533: (Length of Sequence = 337 Nucleotides)

ATGGCTTTAT TTGCTGATTG AGAAGTGGTC CAGCCGTGGG CTAGCAGTCA TTTACATATC AGTGACCAAA TGCAAACATA
CCCGTACTAA CAGTGCTTTG GTCCATGACA TACCCCTTTG ACAGCCCAA GCTGAAACGT CAACTCTATC TGGGGTTACT
TGCTTATACA AAGATGTTAC TCTAGCAATT GTTGCTTGAG GGCAAGACCN GATGATTGTC ACTAGTAGGA AGAAAGCAGA
AGTGATGCAG CTTACACTGC ATAGTCCCTA CCCTTNTGGA TTAAATGGAA AAGTTGCTCA AACATAAACT TGTCTTAAAC
AAAGGTGGGT AAGANTC

SEQ ID NO:1534: (Length of Sequence = 317 Nucleotides)

ATGGGCATGT GGGTACTACG TTTAAATATT TAATTATTTT AAAAATAAAA TAGGAAAGAT AAAATAGCTT AAAGTGTATT
GATGCTCTGA ATAACTTTAT GAGTGAATAG ATACTGAAAT TTGAAGTCAG TGTTTTCAC AACAAATCAA GATTTGGGAC
TGGACTTACT GGGTTGGGGA CTTCTTAGGG ATAACGGTGG TGCTATGAGC ATGCTGAAA GATGAGAAGC AAAAGCCTGG

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SEQ ID NO:1522: (Length of Sequence = 405 Nucleotides)

GTGAATTCA AGCAATTGTT AATGGGGACC AACAGGGCTG CATTAGAAA ACCACTTTNN ACTGATCTCT CCCCCACATA
 TTTTAAATTT GTCTTGCTTT GTTATTTTG GTTATGCAAG TCCTTTCTCT TCATGAAACA AGTGTAAGGC TCTAAGGCTA
 AAATAATAGT TATTTTGTG GSCCCCAAT AGCTACTTTT GAATTTCTTT CTTAGTATA TCTCAATCT GGGGAACATG
 GAACTTGAAG ACTCCTAACC ATGAAGCATT TGGAAAAATA CATATCATT ACITTTTACA GAACCATTTT CTTAAAAATA
 AGGGGGCAAT ATCCAGATT ACATGCATGT TCATAAATA AGCTTTGGTT TTAACAACA TCCACACCAG CAATTATTTT
 CAGCT

SEQ ID NO:1523: (Length of Sequence = 284 Nucleotides)

AGNTACAGA ACTCCAATTC TTTATTATC ACAGCTTGCT CACAATGACA TACAGGAAA TAGCACTAAT GAAGNGTAA
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGNTTCA AAACITGCGAT AGGTACTTAT GGTGGGTATC
 TGGTGATTCT NAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAAGTGGT CACTTTCACA GATGNGTGT TTTGTGTGTG
 GTGTGTGTAG TAGGCAGGAT TGCCTTACAC TGGGAAGAA AGAC

SEQ ID NO:1524: (Length of Sequence = 299 Nucleotides)

GTGCTGTAC GTGACAGTTT TGCTGATCA CATTITAGGA AGATGATGCT GTTCTTNCIT CTTAAGTATT TATTTNATC
 AGTCAAGTGA TAGGAAGTTC AATTTCAAGT ACAAGACATT TGGATCAAGA AGTGACTATT ATTTATTAT TTNAGATGGA
 GTCTTGCTCT GTTGCCCAAG CTGGAGTGCA GTGGTGTGAT CTCAGCTCAC TGCAACTTCC TCCTCCTGGG TTCAAGCAAT
 TCCNTGCTCT CAGACTCCCG AGTAGCTGGA ATTTACAGGC ACCCACGGG ACCAGTGAA

SEQ ID NO:1525: (Length of Sequence = 398 Nucleotides)

GCCCATGAAG CAGCTCTCGT GGATTGGAGT CTCATGCCCTG CAGCTCTCCC ATACTGGAGT TGCATGCTGG TGGTCTTACA
 GTGCTGGTGT CTGGSCAGTG GCTCACTCC CATGCTCCA GGAGGCATIG CCTGGTIGAG GGATCTCTGT GGTGGCTCTG
 TCCCTGTCAC AAGTTCTGTC CTGGGCTTCC AGGCTGTCCA TGATATCCTT TGAAATCTAA TTGGAGGCTG GCATGACCCC
 ATGGCTTCCA CACTCTGTGC ACCTGCAGAA TCAGACCAT GTGGACACTG CCAAGACCTA CCTACCACTT GTGCTCTCTG
 GAGCAGCAGC ACAAGCTACA TCTGGGGCTG CTTGAGCCAT GGCTGGGGCT NCCAAGGAGC AGAGTCTGA GGGTGGCC

SEQ ID NO:1526: (Length of Sequence = 318 Nucleotides)

GTCTCTCTCT ACTGCACCAT GATGCCTTTA AAAAGAATCT AGGGGCTGGG CACAGTGGCT CAGCCTNTA ACCCAGCACT
 TTGGGAGGAG TTCACTTGAG CTCAGGAGCT CGAGACCAGC CTAGGCAACA TAGTGAGACC CCGTNTCCA CTAAAAATGA
 AAGCAAATTA GCTGGGTATG GTGGTCCATG TCTGTACTGT GGTCTAAGCT ACTCGGGAAG TTGAAGCAGG AGGNTCACTT
 GAGCCAGAA GGTCAAGGCT GTAGTGAGCC ATGATTNTGC CACTGCATT CAGCCTGGGC AACACAGTNA GACCTGT

SEQ ID NO:1527: (Length of Sequence = 313 Nucleotides)

TTGGCTAGAA GGGAGGCTGG AGCCTTTCAT GGTGGCTTTT GAATGCCATG GTGAATAGTT TGTCTTTTAT TTGTNATGA
 ATAGCAATTT GTACACTTCT GAGCTATTAG AGTGAAATGA TTAAGCCTGT GGTITAGGAA GAAAGAGCCT ATTAGGGAGA
 TAAATCTTTC CCTAGTGTGA GGAAGGGTGT GAACAGTATG ATATGGAGAG GGTAGTAAATG AATGANGGAA TNGAAAACGA
 GAATAATTT AATGATACTG GAGGTGCAGT ATACAAGTTG NGCAGTAGGT TTATGTCTAG GAAGATAAGA AGT

SEQ ID NO:1528: (Length of Sequence = 405 Nucleotides)

GCGTGTCTA CCGCCACCGC CACCGCCACC GCGCCGAGT GCTGTCTCTA TGGGAGGAG GAGGAGGAGG AGCGGAGTC
 AGCGACACAA GTACATAAAT AAAGGATAAA ATATTTTATG AAACAAATCT TCAATCAAGT ATAACATTTT GATGCTTGGC

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TTTTGCCTTA TTCTATCCGA TTTTTCCTT AAGCTTCTAC CTGGNATTIN CCTTTGGAAA AGTCTCTGAG GTTCCACCAA
 AATATGGAAC TINATTTTGG ACACTTTGAC GAAAGAGATA AGACATCCAG GAACATGCGA GGCTCCCGGA TGAATGGNIT
 GCCTAGCCCC ACTCACAGCG CCCACTGTAG CTTCTACCGA ACCAGAACCT TGCAGGCACT GAGGTAATGA GAAGAAAGCC
 AAGAAGGTAC GTTCTACCG CAATGGGGAC CGCTACTTCA AGGGGATTGT GTACGCTGTG TCCTCTGACC GTTTTCGCGA
 CTTTNACGCC TIGCTGGCTG ANCTGACGNG ATCTCTNTCT GACAACATCA ACCTGCCTCA

SEQ ID NO:1517: (Length of Sequence = 411 Nucleotides)

TGAGCAAAC ACAGAGGACT GCACCTCTAG TGGCTCGTAA TGAGAAAGAA GATGGTCTCA AACCTGAGAA AGATAATGTG
 GAGTGGACCT CTGTTGTCTC AGTATTAACA GTCCCTTCTA GGAAGTAGGT AGCATTCTCTG AAAATAGAGT GAAGCAATTG
 ACTGATGGAT TTAATCTTTA AACTGCTTAG GTAACCATCA ATCTGTAATG AGCTTAATAC TCTTAACTAG GTGCTATTTT
 NCATGTGTGC TACTTTGCCA GTGATAAAGG ATTACGAAAA ATTCTTTACC AGAGGAAAAA AAAAAATGA ATGACCTTTC
 TTGGGAAGGT GGTCCCTTGT TTGTGATCAA ACTTTGACAA GAACTGGTAA TTAATTTCTCT CTAAGGAATT NACCGTTCTC
 ATAGTGTGTT T

SEQ ID NO:1518: (Length of Sequence = 388 Nucleotides)

GGTGGGCAGC TTCTCTCTGC AGCTGCTCTC CCATCATCTG GCTGAATATG GGGCTTTNAT GGGCTCAGG GGAGGAAGTG
 TGTCNAAAT GGTCCGTGGG CAAACATGGG CGGGCTTGA AAAGGCACCA CAAGTTCCCA CCCAGTCAG TAGGATCAGC
 AGTCTGACAC CCAGGCTTCA GGCCTCCCC GACTTGAAGG TGGTGTCTCA CCAAGGACTC ACCCACTCTT GCCCAGGAGC
 TTGTNTGCTT CCTGCTGCCA TTTATGGTGC CCAGGCTGTT TGTNCCAAGG AGTGTCTGTG GGCCAGCCTT GAGCTGCCCT
 CAGCACCCCC TTGGCCTCTT TTCTGINTCT ATTGGTGCCC AAAGTCCGCA GCAGGCTGAA GTGGCAGG

SEQ ID NO:1519: (Length of Sequence = 358 Nucleotides)

TTGGTTAAGA CCAAAGTCAG ATCACTCCCT CCTAGCTCCA AACCTGCACT GGCTCCCAAT TCINTCAGCA TACAAACCCA
 GATCCTCAGG CTGCCATTIN TGGGCTGAAT CCTGTCCCTG CTGTCTGATC CCACCAGACA TAATGGAGGC CTGAGGTTCC
 CTGAACACTC CTAGTTTAGC CTTAAGTTAA GTATTGTCAC ATGCTGGTTC CTATGCCTGA GATAATGTTT CACATTINAT
 CCCATTGCTT GCCAGAAATA GAAACCTTTC CACATAATTN CAAAACAGAG TTTACANCAC AGAGCTTTGG GTGACTGCAG
 GCCTCCAAGA ANGGNAGGCA GAAGGGGCAC TGAAGAGT

SEQ ID NO:1520: (Length of Sequence = 379 Nucleotides)

CCAGAGTTAA ATATGCCAG GCTGAAAGAA GGTGTATAAT GTATGGNCGT NCTTATACCA AATGATTCTT TTGGAATTTA
 AACAAATATG TTTAGTATTT TATTCCTAAT TTAGGAAGAA AAAGCAACTA AAGTTGTNCT GACATTGTAC ACAGATGAGT
 AGCACGTAAC TTTTATTTAG TAAGCCCAT AGGATAGTAN GGNATAAAG TTGTTAGTGA GCAAACAGG AGTATCCTGC
 CATTGCTTTT AATTCINCTT GTGATAGTTT TGAGGGTACA ATAATTCCTG TGTGCGTGTG ACTCAAGCAA ACCAGAAAGT
 GTCTTTTGTG AATACGCATT TTGGGCCTCA TCCTCATGGA GGTCCCGTT GTTGTGTTG

SEQ ID NO:1521: (Length of Sequence = 339 Nucleotides)

GGGACAGGAA GCCTCTTGGG TTGGACTCAG ACTCAGGAGG TGACTCAAGC CTCAAGCTCA GAAGCCCTCT GTNACCATCT
 GTTGACTCAG AAGCATGCCC ACCATCCCAT GCAGTGCCTT TCCAGGCACT GTCCTGTAGC AGACGGAGTT CAGGCTTTGG
 AAGTAGACAG ACCTGGGTTC AAATCACAGC TCGCTTCTT CCGCTGAAG CTCCATAACC TAGGATAAAG TCGTAAGCC
 TNCCTAAGTC TCAGATTTCT TACCTCTAAG GTGAANGAT TGGATTCCAC TTTACTTCCC CCCTTTTCCC TTTANGGACT
 CTGCATCCTC NTTGCTTG

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SEQ ID NO:1510: (Length of Sequence = 247 Nucleotides)

TAGGAAAGAG TAAGANCTTC TTNCAGGCT GGAGGTGCTC GTATGGTGGG ACAGGAAAGG GGAAAAGAGA AAGGGGCAAC
 ATGGCAGACA TACCACGGTT CCTACAGAGA TTAGGGGCAG CCTGGCCCG GGAAGTACAC AGGGCAGAGA GCTGACTCTC
 AGGCCAGGAA GGAGTTAGC TCTNACCCAT CCTCANGGAC CACGGCTCTC CCCCAGCCTC AGCTGACACA CACACAAAGG
 AGCGTTT

SEQ ID NO:1511: (Length of Sequence = 369 Nucleotides)

CCTCTGCTC CTTTATTAAC TGINCTTCCT GTAGTGTGTA TTGGGATCC ACTGGGAATC ATAGAAAGGA ATCAGTGCTA
 GGNCTGTGTG GGATTCACCC CTGAGGGATG TGGCTTTGGC TTCTCTATCA ACCTTTCTGT TCCCTTGTGC TATAGGAGTT
 AAGTCCCTTT NATGCCCCCT ACAGTGGATT ATAGCTATGG CCTGTGGCAG GTGTATTGTT TACAATAGCT GAAGAATTTT
 AGGCCCATGC TTTATGGGGG AGGGTTTINC TAGCTAGTAG TCCCCTTTCT TTCTAGATTG CAGCATAAGC GTGAACCNCC
 AAGGAATGCC ATATTTTAGA ATCCTGTNAT AGGATGGTTA AGGCTTTTT

SEQ ID NO:1512: (Length of Sequence = 236 Nucleotides)

ATGCATTAAG AAAAGACAGC CAAATGACAG ACTGATAAAA TATTTTCATT ACAAAATTGG TTGAGAACTA CCGTGTGACG
 TAAATGAAGT TTCTATTACA CATGTACTAA CAGAGACTTT TCATTACATA TTCTAGGATA TATTTAAAT ATATGTATAT
 TTGATATTA AGGGAATATA TTTGTGTGTC ATTTTACAAT GTGTAACTAC ATATATATTA NGGCCTTTCC AATAAA

SEQ ID NO:1513: (Length of Sequence = 408 Nucleotides)

CATTAAATATT CTCAGTGTG GAAATATTTT NATATTGCCA AGACCATAAT GTGAGGNGTG CAGCTGCATA ANTCCCTGAG
 AGAAGATTAG TGGGGCTAGC ACCTTACAAG GAAAGACAAG CTGTGTGGCT GGGCCCAAGG ACAGTCAAAT GTCTGCCTGA
 CAATCTCCAC ACAGAAGGGT TGCTCAGATC ACTTAGGACA CCCAGAAAGA GCTCACAAG GCACAAAC CTAAGGCTGN
 TATCTCCAT CTAGCGGTAC TTACCTGGGA ACTGAGTGGC AGTGGACAGG AAGCAGGGCC TGGGCTAGGG AGACCCCTCAG
 GAGGAANGGG GACCCAAGAA GTTAGAAGTC CATTCAITCA TATACTCAIT CATTGAGCAA ACATGCGCTT GACACCTTCT
 GTTATGCT

SEQ ID NO:1514: (Length of Sequence = 359 Nucleotides)

TTNCCAGGC TGGTCTCAA CTCTGGGCT CAAGTATATCC GTCCACCTTG GCTTCCCAA GTNCTAGGAT TACAGGCATG
 AGCCACTGIN CCTGGCTAGA AAATNINITT TAAAAGTNA GGATGTAGAA TTNCCTAGCT ATGTAGGCAA GGCAGGAGGA
 GAGGGGCCCA GTTGGGAAGC ATAGCCACA AGAGTATGAG GGCTGANCC AGGATGGTGG CAACAGGGAT GGAGAGGAAG
 GCGTGCCAGG GCATGGTGGC TCACACCTTA TAATCCTAGC ACTTTGAGAG GCTGAGGGAG GAGGATCAIT TTNAGCCAA
 AAGTTAGAGA CCAGCCTGGG GNAACATAGT TAAGGACAC

SEQ ID NO:1515: (Length of Sequence = 343 Nucleotides)

GAGCCCCTTG ATGGCAAGAN CTGACCTTC CATCTGGAG AAGAGGAGAC CAATTINATA TTATGGAGGC AGAATATACA
 GGACTGTGTG ACTAATTGA CATGTGTGTC CATGGAGCTT GAAGGGGACA GAACCACAGG TGCAAACTG GTGTAGGTAG
 TGCTGGCCAT TGCTCAGAAC TTTGTGTGAG TTGAGCCAG GCCTCTGGTT GCAGGACTCG TGAATGGAGC AGTTCTGAGA
 ACCACCCCTT TGCTAAGGGA GCTTNGGAGC CACATGGCTG CTCCCTTCAC ACTGGGTAACT AGTGTAGTAT CCTGTGAGAG
 AATAAACGTA TTCATTTAAA AAG

SEQ ID NO:1516: (Length of Sequence = 380 Nucleotides)

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AAAGACTCTT TGCTTTAAAT AATACTACTG GGCTGATTAC ANITCAGAGG TCCTNNGATA GAGAGGAGAC AGCCATTAC
AAAGTGNACG TGCTGGCTAG TGACGG

SEQ ID NO:1504: (Length of Sequence = 311 Nucleotides)

ACTGGATGGA TGTTTGATCT GTGTGGTCA TGAAGTTGTT TTTTTTTTTT TTAAAAAGAA AACCATGATC AACAGCTTT
GCCACGAATT TAAGAGTTTT ATCAAGATAT ATCGAATACA GCATGGGATT GGGAAAGTTA ACTAAAGGTA TTTGAGCTTG
CACTGGATCT TGAAAGGTAG AAAAAGGGAG CAGGAGGAAA CTCATCCAGG TAAGAAAAAT AGACTGTNCA AGATGGGCAT
GAGAAACAGT GAGGTCCNN GCTGGAGGTG GGTGCTAGTC ATGTTGAGCA CTNCTGGCAG GAGAGGTTTT T

SEQ ID NO:1505: (Length of Sequence = 363 Nucleotides)

CCACTCATGG CAGAAGGGAA GGGGAGCTAG TGTGTGAGA AATTGTATGG TGAGAGAGAA GAAACAAGAG AGAGGGAAGG
GAGATAGCAG GCTCTTTTCA ACAACCAGCT CTCATGGGAA ATCATAGAGT GAGAACTCAT TCACTACCAT GAGAATGGCA
CTAGGCCATT AATGAGGGAT TCGCCCTAT GACCCAAATA CCTCCCATTA AGCTCTACCT CCAACACTGG AGATCACACA
TCANCATAAA ATTTGGAGGG GTCGAATATC CAAACNTAG CAACTTGAA CCACCAGAAG CTGGAAGAGG CAAGGAAAGA
TTTTINTCTA GAGGCTTCAG AATAAGGTAT TGCAATTCTG AAA

SEQ ID NO:1506: (Length of Sequence = 177 Nucleotides)

CGGACAGAGC AGGGCAGAAA AATGAGGGAA GGATGACAGA AGCTCATCAG AAAGCCAGTA ATACATAAGA TTAGTTTTNT
CAGCAAAACC TNGTAACTT TGACGTAAG AGACAAATAT TTTGATCTCT CATTCCCACT CTCAAAAGG TTTCTAGTTC
ATATTGTTTT GCTAAAA

SEQ ID NO:1507: (Length of Sequence = 345 Nucleotides)

CTTGCTTGAT TTTCCCTGT GTGTCAGAGA ATGTGCACAT TGAAAGAGAG GGAGCTCTCC ATCACCAGA GAGCCCAAAA
ATAGCCCAAC TGATCATAGC CGTTGTAAAA ATATTCTAGG ATGTAAGGAA AGATCCTTTC CCAGTCTGAT GCTCCTTGAC
TTGTGATTTG CTAAATTTGA GAAGCCATCA CTTACACAAC CTGTTTTATA GACAAATCCT TCCAGTTTCA GAAGAAAAAA
TGTCTCTAT CTCACCTCC ATCTTTTTT CAAACTTCGA TAGATGAGAA GAAATGGTG AAATAAATTT TTTAGAATCA
GTTTTGCAAG ATTGGTTTC AAGGA

SEQ ID NO:1508: (Length of Sequence = 326 Nucleotides)

AGTTGGATT CAGCTACTCA GAGTAATTGG AAAAGGCCAC AGCCTGGTGG GCTTCACAGC TTTCAGAGAC CTGGTAGGGG
ATGGCTAACA GGTTCNCTG CCAGGAGACA AGTGGCAGAC CCAGGTGIGA AACTTTTACA GGTCCACCA AGCCTTTCTT
ATGGAGCACA GAGCATAAGG ACAACTTCTG CAGAAATGGA ATGGGGTACT TGGAAACCAA AATACATACA CCTCCTTTCC
CACCTGCCCTC CAGCTTAGTA GCCCATAGTC CTCCTTGTCC CTCACACTGA GCCAGGGCCT GNCCTAGATG ATGAAATGCA
TGGCCT

SEQ ID NO:1509: (Length of Sequence = 329 Nucleotides)

AGTATGGGTC CCTTGGTACT ACTCAAGGTT TACAATATTG CATTAAACAC ATTGAAAAAT ACACGAGAAC CTTGAGGGAT
CACATTTTAC TGCAATATGT GATTTCCTGG TGAGACTCCT TGTGCAGAGA TGAATTAGCTC ACAGAGCGTT GTAAGCACGT
ACTGCAACA CCTGAGCATG CCGCAATGGC AACAGGAGGT ATCTTCACAA TTATGATGGT AGTACAGTAT GTACTGCAGT
TGTTTACACA GTTATGATTT AGTACTACAT CTTTACANIT GNTATTNCT TTNCTATTTT GAATGGTATG TACTGTCTGT
GTGTACATA

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CACACACATA CAAATCTGT CCATTGCGG GAGNAATNTG TATGTATGTN AGTTGGAGGG TAITAAAAAT CAGTTTTATT
 CCAAGATT AAAACTAGAC ATGACTTAAA AACAAATTTCT GGAGCACTGC TTGCTGACAA TCTCGTAGTT CTCCTGCTGCA
 TTTGAGTGCA TTTTGTGGCC AGTCCATCAG GCGGTACCAT GGGATTATAT TTGAATGTGT GGTGCATCCT TCCTGGATGA
 AGGATGTGTG AGGGACCTTG AACCTCAGCT GTATTAAACT GTAGCGCCTC CAGTCAGTGC ACTAGATGAA ACTTTTAGAC
 ANCCTGAATT CTGTTGGGTC CNITCTTTTT CCTTTATGTA GGCAGNCTNC AGCATG

SEQ ID NO:1498: (Length of Sequence = 281 Nucleotides)

TTTATAGGAC TTCTAATCTA ATTTNCTTAT AGTGTGACTA AAAGGGAGGC AAATTATTGG AACGGATTAT TCAAATGGNT
 CCTTAAATAT TGCTATGTAT AATAAGCCAG TTATATATATC AGGACCATGT TCTCTGTAGG CCAGTGTTTT NCTCTCTCAT
 TCTCCAGTGG CGGCGCGGG GAAGGCGGAG GCAGAGGCAG CAGCAGCCGC GCTGGCTGCA AATGAATGAN CCCCCAGCTT
 GGGGGGAGGA CTCCAGGTGA GCCTCTGCCC TOGGGAGGCC C

SEQ ID NO:1499: (Length of Sequence = 395 Nucleotides)

TTTATCACA CCCTGTTTTT CAAGGGTCCT GTTACGTACC ATTACCAATT CTGCTTAGCA ATGGCTTGTG AGATGGCATT
 TATTCCTTCA GCATGTATTT TNATGTTTAC CTTCCTCTCA CCTAAATTCC TCCCCCACC CAATAACAAT TAGTGTCTCT
 ATTTGCATGT AGCCAGAGCA AAAAATGATT TCCTTCCCTT AAGTACTAT TATTATAAAA GGGACGATAA ACACATGAGT
 CATTATACCA CAAGTATAGT GTGGAAAGGA CTCTAAACAT AGGCTCACTG AAGAAGGTGG CATTTGGGCC AGGGCTCAAA
 ATAAGGCAGA TTCAGATTG AACTGAATAG ATGGAGGAGT CATTTCAAAC AGAAGGAATG NCATAACATG TGGAG

SEQ ID NO:1500: (Length of Sequence = 272 Nucleotides)

CTGAGTAAGN GTTCCAGTC GGTCCCACTG GTCACAAATT TTNIGGCACC GATCATTGAC ATTCACAGCG TCGTGATAGT
 CCGTTTCATT GAGCTCCTGC GCGATGGCTG CGATCTGCTC CACGCGGTCC TGGTGCGCTG CCAGGTGCT CTGGAACGNC
 TCGTCTTCC GCAGCAGAGC CCGNACCTCT NINAGGACG CCGACTCGTA ATCCTTNTGC AGCAAGATCT GCTCTTTGCC
 ATAAGCCCAA GTCTCGTGGG TTGAGGCCTT CT

SEQ ID NO:1501: (Length of Sequence = 394 Nucleotides)

TTTTTTTCC TGGACCTGTC ACAAGCTTTA TTGTCCGAG CACAGACTCG CCACACTTCA ACAATTCCAC TGTGGGGAGG
 GGAGGGGTGA ATGAAGGACC TGGGGAGGG ACATGGCTGA GCCACANCCG GCGGGCCACA CGGGGCGGGC TGAGAGGCCC
 ACGGAGGCAG AAGCTCCCAA GGAAACCGCT TCTTGGACAC CCGTACCAG GAGCCACCT CCGGGGGCTC AGNTCCTCCC
 GGCACCTCC TAGATGGACC TCTGGCTGTT AGTAGACTAA TCGGTGCCCC TACCGATGGG GCAGAGCTGC CTGATTTTGT
 CTAGAAAGAG CTGTATTTGA NCCINGGTTA GGNCACTAAA GCATCGTCT AGACGGCTGT TAATAGAACT NCAT

SEQ ID NO:1502: (Length of Sequence = 373 Nucleotides)

GAAACAAGGC ATAATGTTGT CACAGAATCA GAGATCCAGT CTCACTTTTC CACAAATCTC CAAATCTCCA GTCTTATCTT
 GGTGCTCTA ATGGTTTGGT TCAATCCCTT TCCAATCTT GTTTTCAAAG CATGGGGCCT GAGTGTCTC CACTCCTCCT
 AAGAAAGGAG CTTGGGTGGA AGGGACCATG CTGACCTCCT CCATCAGAGG GCTCTTCCAG TAGTATCTC GGATGCAACC
 TCCATTTCTC AGTTACCATT APTTCTGTGA TCAGCTTTGT CCTTCTGGN GGGATGCACA GTGATCOGGG CCACCACTGT
 TGTGTCTTG TGCTCTGCT CTTCCTATG GTTTCAGNT ATTTCTGGG GTT

SEQ ID NO:1503: (Length of Sequence = 266 Nucleotides)

GNCAACAGGC CAGTNTTAA AGAGGGTCAA GTGGAGGTGC ATATTCCAGA GAATGCTCCC GTAGGTACCT CTGTAATTCA
 GCTCCATGCC ACTGATGCAG ATATAGGCAG TAATGCTGAA ATCCGGTACA TTTTGGTGC CCAGGTGCGC CCGCAACCA

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TTCACCTACCA AAACCAGTTA CAACAGTTCC AGCCAAATAA CACAGGCTAC CCCATATGCC ACGACACAGA TCTTGCAATC
 CAACAGCATA CATGANTTGG CTGTGGGTCT GCTGATCCN CAATGGAAAA GCTCAATTCA GCAAAAAACA GATCTGNTGG
 GATTTGGTTA TTCTCTACCT GATCAGAACA AAGGTAAACAN TGCCCTTACTT TACATTCCTG ACTACCGNIT GGCTGAGGGA
 TTGINTAATA GAATGCCACA NAACCAGTCT NAGGATTTTA GCANCCACCA GCTCTNACAA CAGCTCAGGA AGGAGTTGGC
 AGINTCTCAG GTGGG

SEQ ID NO:1492: (Length of Sequence = 321 Nucleotides)

GACTTCATAA AACATCCTTT ACTATATTTT NAAAGAAAGC AGAAGTAACA GCAATATATG TAAAAGTAAT GNTTTAATGN
 CTATAAGCAA GNCAAAGCAA TAGAATTGTG CTCTTTTTCG AGACTGGGGN CAATGAAATG TTTAGCTACA ATTINCCAT
 ACAAACATGA AACAATATTC ATATAGNNIA ANCACCCTCA CAAATAACTG ATGGGTGATG ANCACACACC AAGTTCGACC
 AAAGCAAAAA NTAAACTGAA AATTGTGGG TGGGGTTATT CATATTTTAA ATTCAACATG CTGCTCTAT TTAATAATAC
 C

SEQ ID NO:1493: (Length of Sequence = 315 Nucleotides)

GACGGAGCGA GGGGACAGAG CCCAGGGATG GAGGCGGGAT GCGGGGACAA GAGCCAGGG ATGGAGGCGG GATGCGGGG
 AGCAGCTGGT AATGTGCAGA GACTGGGAGA GGGCGGTGTC CAGGTGGAGA GTATTTCAAG GAAGAGAAGG ATTAACAGCG
 TCCACTGCCG CAGATGGGCC AANCNGAGAT GGGACTGGAA ACCAACCCT GCATTTAGCA TCCTGGGGNC TGCTNATAAC
 CTGGTTTGA TGGCTCCTCA AGAAGAGCCA NAACCTTINA AAGTTAGTTC AAGAGAGAAG GGGGAAGAG ACACT

SEQ ID NO:1494: (Length of Sequence = 405 Nucleotides)

AAAAGTTGAC AAAACATAAA GTATCTCTAG ACAGCAAGGA AATAATTTCA CGAGATTGCT AAATTGATGT CAACACCTGC
 AGTCTAAAAT TTATACAGTT CAATATGTGT CATTIGATCA CTGGCATGTC AAATATAGAA CAGCTATGAC TTTGCTGGCC
 AGTAAATTAT CTAGCAGTGA AAATCACTTT TTAGGAGAGT CGCAATCAAA CATTTGTTAA CGTGGGAGCC TATAAAGATG
 CAAATTCCTG AACCAACAGT TCTAAGAAAA GTACATTGGG TCACTCTGAA CAGGTGGTAT GAACATTTGA TTTAACTGCA
 AGATCTNCNG CINTTTACGG GCTTTGTAC CATCGNATGA ATCTTACATC CGCTGATGAC TNAGAGCAAG CAGGGGCGAG
 CTGCC

SEQ ID NO:1495: (Length of Sequence = 364 Nucleotides)

CGTCTAATGA AGAGCTTCGA AACTTGCTCT TGTCGGCCA TGTTGGGATTT GACAGCCTCC CTGACCAGCT GGTCAACAAG
 TCTACTTCTC AAGGATCTG TTCAACATC CTTTGTTTG GTGAGACAGG CATTTGGCAA TCCAGGTTAA TGGACACTTT
 GTTCAACACC AAATTTGAAA GTGACCCAGC TACTCACAAT GAACCAGGTG TTGGTTTAAA AGCCAGAAGT TATGAGCTTC
 AGGAAAGCAA TGTACGGCTG AAGTTAACCA TTGTTGACAC CGTGGGATTT GGAGACCAGN TAAATAAAGA TGACAGCTAT
 AAGCCGNTAG TAGGNTATAT TGATGCCAG TTGAGGNCCT ACCT

SEQ ID NO:1496: (Length of Sequence = 370 Nucleotides)

GTCTCTTGA GCAAGGACCC AGTTATTCAT CTTAATTCTC AGGGGAATCT CTGTAGAGAT GAAAAGCAGG AGAACCAAGG
 CAGCCTGGTC TCCCTGGGTG ATGAAAAACA GACTAAGAGC AGGGACTTGC CTCCAGCTGA GGAGCTTCCA GAAAAGGAGC
 ATGGGAAGAT ATCGTGCCAC CTGAGAGAAG ACATTGCCCA GATTCCTACA TGTGCAGAAG CTGGTGAACA GGAGGGCAGG
 CTACAAAGAA AGCAGAAAAA TNCCACAGGA GGGAGGCGGC ACATCTNCCA TGAATNTGGA AAGAGTTTIN CTCAAAGCTC
 AGGCCTTAGT AAACACAGGA GNATNCACAC TGGTGAGAAA CCTACGGAT

SEQ ID NO:1497: (Length of Sequence = 376 Nucleotides)

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SEQ ID NO:1485: (Length of Sequence = 334 Nucleotides)

GAAGGAGCGG GGAACCAAGT TCTCACTCTC CTCCCACTTG CTATTGTGAG AAGAGCGAGA TTTCAGGGCA GCAGAGAGCA
 TCAGGAGATC AAAAGAAGAC ACTGCTGGGT GGTCCCTTAG CAAGTTTTAG CTTCTTINCC TGCTGGGAGA GTATTCCCTG
 GGCACAGTGC CAAGTGTCTC TAAGAACTA GTCATGCCCTG ANCTTAAGGG CTCGCGGATT CTGGGTGGTG GATTTCCTTA
 GGCTGTCTG AGCCTGCCAG TGCTCTCCTC TGTCGCTCTG ATTTCCATT CCGCTGAGCA GTCTGCACIN CCTTGGACAG
 ACCCACTGGC ATTT

SEQ ID NO:1486: (Length of Sequence = 164 Nucleotides)

CTGAAACGGA AAGATGGCGC TGCTGINCTT CTAAGCCTAG GCTTCTTGCA CTAAAGCACC AAGGGCATCG CACACAGGCT
 TGGCAGAGGG GCCATGGCCA GANTCACCAC CTTAGACAA GTATGTTGGA GGTCTCGAAT CCCTTGGCAC CCCCAGCAT
 GCAG

SEQ ID NO:1487: (Length of Sequence = 298 Nucleotides)

TTGAACCCAG GGGGCAGAGA TTGCAGTGAG CCGAGATCGT NCTGCTGTAC TCCAGCCTGG GCAACAGAGC GAGACTCCAT
 TTCAAAAACG AGAACCCAGA GGGCTCACTT GCCCCTTCCA CCACACAGTG AGAAGGCACC ATCTATGAGC CAGGAAGCGG
 GCCCTCACCT AACAGGATCT NCTGGGCCTT GACCCAGGNC TTTACAACTT CTAGANCCAT GAAAAATTTC TGTGTTCCT
 AGCAGNCCAA ACAGAATTAG AACCATTAA TTTATTTCT CTTTAGCTT AACACTGG

SEQ ID NO:1488: (Length of Sequence = 343 Nucleotides)

TTGCTAGTTC AGGNTCAATG TCATGGCTGT AACTAATATA GTACATTGG CAGTTGCAAC GCGAAATGAT CCGCTGGACT
 TGCTGGGCTT GCTGTGCTC ANCTGGCTGG TTCCAACTCG TGGTTGTTGGT AACCATGCCG CCCACTGCC TGCCACTCTC
 CATCAGCTCC TGCACAGAGT CCAGACTACG CTGCGGGTGC TCGCTCTTTT GCCCAGGTG AAGTGCAGTG GCGCAATCTC
 AGCTCACTGC AACCTCCGCC TNCGGGTTT AAGCAATTNT CCCCACCTCA GCCTTNCAG TAGCTGGGAT GACAGGGGCG
 CGCCACAACG GCCAACTAAT TTT

SEQ ID NO:1489: (Length of Sequence = 412 Nucleotides)

ATTACCTTTT TATAACCCAA GANTGCCATT ATTACACCCG GAACCTCAC CAAATAAGTA GGAAACTAC ACTGAGAACA
 ATTCGGCCCA GCTGTCTCTG GCCCATTTCC CTTTCTACCG CCTCTGTGC ATTCCAGCAA TCTAACTCGA TGAATGATCT
 TCCAGTTGGA AAGATGGGGA CTTCACAATG TGCAGACCCA AAGATCTGTC TTCCAAAGGC CAATCACCAC TGTATCCTTC
 GTTCTTTTAA ATGTCGTTGT TTATTGAAT ATATTAAGGA ATAATATCAA GGGTAATTAT CTATGTATTA AATGTATGNT
 TAATTTTTTA GGGGACCATC ATACTGTTTT TCCACAGTGG CTGTACATTT TACAATTCCC ACCAACAATG CACAGGGTTC
 CATGGTTCCT AT

SEQ ID NO:1490: (Length of Sequence = 356 Nucleotides)

ATACCTTCTT TCATTTAAGC CACCCAGTCT ATGGTACTTC GTTATGGCAG CCTTAGCAAA CTAAACGGA TTCCTCATCA
 GGTTTCAGATT TINCTAAATA AAATGTGTTT GTGAGGGTGG TACAAGCAAC AGTGATATAT TTTTAAAGT ATTTTCCCCC
 AGCCAAATTC CAACAAGACA ATAATGTCTA ATGCACTGTC TGGTGAATCG GAAATCTCC TGAATGAAAT AAGAGCCTCT
 AATACCCAAA AGGGAATGAA GTGAGTCATC ACCACAGCCT GTGAATGAAA ATAATGCTC TGAGGAAAAC ACATGTAAAA
 AATGACACCA TGTGGATTAA ATGGGGENAC ACAAGT

SEQ ID NO:1491: (Length of Sequence = 335 Nucleotides)

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TGGGTTTACG ACATTACTAA TCAGGGAAAC CTMTTGCCCG AGCAAAGACA TGGGGTGAAG GGACTACAGC GACAGGC

SEQ ID NO:1479: (Length of Sequence = 389 Nucleotides)

GCTAGAGNGC CGGCTTGGCG GGTGAGTGG CCGAGCTAA GGGTGGGAG ACCCAAGGGC GGCGACTACG ACGGCGTTGA
TATCGGTGGT AACGACGGCC TCAGCAGGCG GGAAGATGA AAGGCCGNT CGAGCTGGGA GATGTGACAC CACACAATAT
TAANCAGTTG AAAAGATTGA NTCAGGTCAT CTTCCAGTC AGCTACAATG ACAAGTTCTA CAAGGATGTA CTGGAGGTTG
GCGAGCTAGC AAAACTTGCC TATTTCATG ATATTNCTGT AGGTGCAGTA TGCTGTAGGG TGGATCATTG ACAGAATCAG
AAGAGACTTT ACATCATGGA CACTAGGGAT GTNTGGGCAC CTTACCGAAG CTAGGAATAG GGACTAAAT

SEQ ID NO:1480: (Length of Sequence = 384 Nucleotides)

CTGAGAGCCA GGAGCTCTTG CGGAGAAGCC ACTGTCTGCA CGCCACCTGC TTCGATGACC CTGCTCTGCC ATCCCTGTGC
TCCAAGGGCC GGGCCCTGCC GTTGCTGTG CCAGACGGGT CTCAGGGAGA TGCCGGCCAG CAGGTATGCA TGGGAGGGCC
TGGGCATCAA GGCCCGGATT CTATGGCTGC CAGTTTCATT CTCTCGTTGT TTGTCCCTT AGCAAGACTT ATGAGGTTCC
TTGAGGACAA GACTCCCTCC TGCCACCTGG TCTGTTTCCT GAACATTAC TGCCTAGCA CGGNCCTGGG ACGCAGNCTT
TGGGAATCAG GCGTGGCC ATGGTAGAGC GGCTNGCACT GCTCGGCACC GTGACGGACG TTTC

SEQ ID NO:1481: (Length of Sequence = 257 Nucleotides)

ATGTCTAGAG CTATTCTGTT TTCCAAGCC ATTTGGCTAG TAGGCCCTAA TTGGTCAGTG GGTTCGTACC CCCCAATCCC
TACCTCAGCA GCAGGAAAGG GAAGTGCTGG TCTCCACCTG TNCCTACTAA GGCCCGTGG TATCTGGCA GAAGCCTCTG
CATGTATCTN CGCTCTGAGG ATGGGGGTTT NAAAACAAA TAAGACCCTA CGTCTACTA CCTTGAGCTT GGCTCTAAAA
CCACGGGAAA GGAAGAG

SEQ ID NO:1482: (Length of Sequence = 345 Nucleotides)

AATTGAGCTC AGACTAAAGG AATTCTTTT TGAATAATA GTGATTAGT TATGATATC CTGTTGGCTT AAGAACAATG
CCTATGATT AGTTGTGTA TGTATATTG TACTATAAC CAAACAATG ATTGGGTACA AGTAGCCTTA GGGCAATACT
TCCTTAAAAA CATGTTCTG ATAACTAAA GCTTTAGCAT TAACCAGAAG TCATAATTTA ATAGTATTGT AAAAATACCT
CATTTATTTT AAATCCTGTG TTGGGGTAGA GGATTACAGT TGTCATTTCA AATACATGAA TCTCTGTCA AAAGNGTAC
TTTGACAGTT TCATGGGAGG TCAGG

SEQ ID NO:1483: (Length of Sequence = 344 Nucleotides)

CTGATGTACT GTTTTAATAT GCTGAGTACT GTTGATTCAA CAACAACTT TAATGGGTGA TGAGCTTTTG CATACCAATA
TGAATTINTC AGCACTCTG AAAACTGGCC ATCATTTTNC AAATTCACAA TTGCTGGAT GTCAGGGAAC AATAGGAAGA
AGAATGAGCG TCAATTTTCA TGTCTTCCIT TGCTTCTTCA CTGGCCTTCC ATAGAAGTAG TCAGAAAAA ACAAGCACC
ATCAACCACA CTTCAAAAC AATTATGTT GGCCTAAGCT TTGCTCAACA TTCATATGAC AGAAGGTAGN ATAATGAAAA
GGGACTGCTG GGCATCACTT TCCC

SEQ ID NO:1484: (Length of Sequence = 380 Nucleotides)

TTCTTAAAG CAGTCTTTCC TACAATTGT ATGCAGTAAG TCACCTAAGC ACTTAAGTGT CATATGGGTA CTTACATGGA
ATTAGAGCAC TTCTGAATG GAATTAGAAA AAGGCAAAAT GTGCATACTA CTGATGCATT CATTTCTTAC AGAGATATGA
TACCAAGGGC CAATAAGTGA ATAGAAAAAG GGAGGAGGAT TTATTAATGG AATGAGTTCT AACCTGTCT CTACACGCC
ATATGACTTT GGGNTAAATA ATCAAACGCC CAATGAGCTC AACTGTCTAT TATTAGGGGA ATTTAAATGA GAGAATGCAC
ATTAATTATG CATGTCAGAG TACATGGGAA AATAGTAAAA GCTTAATATT TAATACGGTC

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SEQ ID NO:1473: (Length of Sequence = 434 Nucleotides)

GCCTTTAATT TGGTTTINCT ATGCCAGTAC AGAAACATCT GGACAACACT CTGAGCCTG CAGAGGCTCA CGGCCACACC
 CACTTCTGCC GCAGGACTGT CTGTTGAGGA GCOGAACOGA TGAGGCACAG TAGCCAGGCC CTCCOGAGGG CTCCAGAAGC
 TCTAGGTTTA CGGGGTCACC TTCTTGTAGG TGACGTGAAG ATGCTGAGTC ATTGGCTGTN TCGTGGTTGC CATGGAGACC
 GTCIGCTCAA GTTTGCCTTC AGAATTGAGC CTGAACITCC GGGTGATCTG CTCTACGTGG GGCTCCTTGG CGAAGGAGAT
 CCTGGCGATG GAGTGGGATG CGATGCACAG NTCCTGCCC GTCAACTCGC CCTCCTNCAC TTTCCANCAC GGCTGTTTTT
 TTGGCGTGAC AAAAGGCCAC CTTTTTGGTG TCGG

SEQ ID NO:1474: (Length of Sequence = 402 Nucleotides)

GACGTINAGG TGGGAGGTTT GTTTGAGCAA CATAGTGAGA CCCGTCTCT ACACAAAAAC AAAAAAATA AAAAATTATC
 TGAGCATAGT GGAGCATGGC TATGGTCCAA GCTACGTGGG AGSCTGAGGT GGGAGGATTG CTTGCNTCCA GGAGTTCAAG
 GCTGCAGTAA CGAGTAATGG TGCTACTTCG CTTGAGCCTG GGGACAGAG CAAGACCCTG TCTCGAAAAA ATAAATAAAG
 TAAATAAAGT TGAGAATTTT GTATTTTGGT ACAGAAGGTC TATGCCITTN AAATGCTCCA TTTGGACACG CTTAGGGCAG
 GACGCTCTGA AACTGGGAAG CCTGGGGCCC TGTACANTCT TGGCTGTCCC CTGTACANTC TCCTAACTCT AGAGGGCTGG
 TT

SEQ ID NO:1475: (Length of Sequence = 324 Nucleotides)

TTGCATACCT GTGCTGTGTC AGACCAGGCA GAGTCATCTC ATTCCACTGG TCTAATGGAT GGCAATTGAA TTTAATTAAAC
 AAAACTCCTT TGACTTAGTT TCATACTGTG CTGAATGTAA TGAATCCTC TCTGCCCCC TTATCTCTCT CTCITTCCT
 CTCTCTCAAC TAAAAATTGT CCTTAACTAA CATCCACTTT AAGAATATTA AAGGCTATAC ATTATACTTA AAAGATACAA
 TACAGTCATC CCCCTTTCCA TGACTTAAAT TGTATAACAT AAAATAATTA AAAAGNTACT TTGGATAGTG ATACACAGTA
 TAGG

SEQ ID NO:1476: (Length of Sequence = 244 Nucleotides)

GAAAAACCAG AAACTCAAAA TCAGAGTGCC TCTCCTCTC CAAAGGAACA CAGCTCCTCA CCAGCAACGG NACAAAGCTG
 GACAGAGAAT GACTTTGACA AATTGAGAGA GGAAGGCTTC AGAAGATCAA ACTACTCTGA GCTAAAGGAG GAAGTTGCAA
 CCNATGGCAA AGAAGTTAAA AACTTTGAAA AAAAATTNGA CGGATNGATA ACTAGNATAA CCGATGCAGA GAAGTCCTTA
 AAGG

SEQ ID NO:1477: (Length of Sequence = 338 Nucleotides)

ACAACACATA CTTGAACTG ATTATGACTG INTTGAATG CATTTTGATT CCTTAGCTAT GCCTCTCAGG TGAAAGGACC
 AATGGCAAGA GGAAGCAGAG GATTGATGCA CTAGAAAATA CTGAGAGAGA TCAGAGTATT CTGTCTACTT CACTGAAGAT
 ATGGTCTATT GAGGGAAAAC TAATTAAACAG TTGATCCAAG GAACAAAAGA ATGCTGTTAT GTGACATTTT GTTGGGAAAC
 TGACTGTAAT AATAATAAAN CAAATGTCCA GAGGAATGTG TCACATAATT NCAGTGTFTA TGGTTGATAA TTCAAAGGCA
 TAGATGAATT GGGATTCT

SEQ ID NO:1478: (Length of Sequence = 397 Nucleotides)

ACCCITTTCCC ATTCTGATAA TCTGGCCATG ACTAGCAGAA GCACAGCTAG GCCCAATGGG CAACCCAGG CCAGCAAAT
 TTGCCAGTTC AAATGGTCC TGCTGGGAGA ATCTGCAGTG GGAAAGTCAA GCCTGGTATT ACGTTTGTG AAAGGGCAGT
 TCCATGAGTA CCAGGAGAGC ACCATGGAG CGGCCTTCCT CACCCAGTCC GTTTGINTAG ATGACACAAC AGTGAAGTTT
 GAGATCTGGG ACACAGCTGG GCAGGAGCGA TATCACAGCT TAGCCCCCAT GGTACTACAG GGGTGCCCAA GCTNCAATCG

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TGATAAAAGG AAAACGTTTT GATTATAGT ACCAAGTGCT TAAACACAAG GATAGTGITA GATTTTCGAG TGACTTTCCT
 TTTTGCAATT TTTGGCAGTA AAAGCCAAAC GTTGTATTG TCCTTTTCAG AGTTGTCCAG CCCTTTTTTC CTTTGTCCAA
 AATGATTCTA AATAGAATCT AATAAACCA TGTAGCATT TTTTTTCTA AATGAAGCCC CAAAAAGAA AAGTGCCTTG
 CATCATTTAA AAAAATAAT TAAATCCTCA TGGCCTCTAA ATTAGGTATG TAGGGCACTG AAAAGTTCTT AACATTTTT

SEQ ID NO:1468: (Length of Sequence = 352 Nucleotides)

TTTGGTTAAC ATTCCAAACA TGTATAACCA ATTAACATGG CCTAGGGTTT TCTTTTTATT GGTATTCCT TCAGTAACTT
 GAATCCACAG ATATAAGCAG TATATAACCA GAAAGTTACA AGTAAACACA AATTATACAT GCAAATTTCT GTTCACAAAG
 GTCACATGTG CAGGTACATG ANTTAGAAGC GTGCATCTAG GATTATGGCC AAAGTGTCTT AAAAATGCAG AAATGTAAAA
 TTACATCTTG AAAATATGAA GAGATGGTCT ACACACTTCA AAAATCAAAT GTTGCTTATA CCAGAGATGT ATGTCAATCA
 CGGNTTCAA GTGACAAGCA GTAAGGATCC TC

SEQ ID NO:1469: (Length of Sequence = 427 Nucleotides)

GAGATGGAGT CTGTCTCTGT NACCCAGGCT AGAGTGCACT GCGGAGATCT CGGCTTACTG CAACCTCCGC CTCCTGGGTT
 CAAGTGATTC CCGTCCCTCA GCCTCCCAAG TAGCTGGGAT TACAGGCGCC TGNCACCGCA CCCAGCTAAT TTTTGTATTT
 TNAGTAGAGA CGGGGCTTTA TCATCTTGGC CAGGCTGGCC TCCAACCTCT GACCATGTGA TTCACCTGCC TCCACCTCCC
 AAAGTGCTGG AATTACAGGT GTGAGTCACC ACACCCGCC GGATTCTGTT AGTTTTCTTT AATGCATATT GAGTTCTTT
 AGTTTTAACA CACTTAT CTGGGTGGA CCCAACTAT TCACTATGTT TCTTGGGGA NAGCTINGAA TCTTGGGGTG
 GAGCCAATT TGTAAATAGC CAGGGTG

SEQ ID NO:1470: (Length of Sequence = 426 Nucleotides)

AGGAGTTTGA GACCATCTG GGCAACANAG GAAACCCCG TCTCTACAAA AAGAAAATTT GGTTTTATA TTTATTTGTA
 TTAATTTTT TAGAAACATA GCTGGGCATG GTGGCACAG CCTGTAGTCC TAGCTACTCA GGGGCTGAG GTGGGAGGAT
 TGCTTGAGCC CAGGAAGTTG AGGCTGCATT AAGTGTGAT CACACCACTG TNCTGCAGCC TGGGTGACAG AGTGAGACCC
 TGCGACTCCA GACAGGTGCA CACCACCACA CTCAGCTAAT TTTTGTAGA AATGAGGTCT CACTATGTTG CCCAGGTTGG
 TCTTGAATC CCGGCTCAA GTGATCCACC TGTCTCAGCC TCTCAAAGTG CTGGGATTAC AGGCATGAGT CACAGTGCCT
 GGGCCCAAT TCATAGTCTT AAACAT

SEQ ID NO:1471: (Length of Sequence = 372 Nucleotides)

AGATATTAA AAAAGACCAG ACGCTTAAAG CAAGANTTGA AATACCTAGT TGTAAAGATG TGGCACCTGT GGAGAAGACT
 ATTAAGTTGC TTCCAGTAG CCATGTGCA AGACTACAAA TATTCAGTGT AGAAGGACAA AAGGCAATTC AGATCAAACA
 TCAGGATGAG GTTAATTGGA TAGCGGTGA TATTATGCAT AANCCTAATT TTCAAATGTA TGATGAAGGA GAAAGAGAAA
 TCAATATAAC ATCAGCTTTA GCAGAAAAA TTAAAGTTAA TTGGACTCCT NAGGTTAACA AAGAACACTT GCTACAGGGT
 CTGCTTCTG ATGTGCAAGT ACCNACATCT GTAAAAGATA TNCCTATTT CC

SEQ ID NO:1472: (Length of Sequence = 332 Nucleotides)

GGTAGAGACA GGGTCTCACC CTGTGCTCA GGCTGGTCTC AAAGTCTTGG GCTCAAGCNA TCCTTTCACC TTGGCCTTCC
 AAAGTCTAG AACTGGCCAG GGGTGGTGGC TCATGCCTGT AATCCCAGCA CTFTNGGAGG CAGAGGCGGG CAGGGAGTTT
 AAGACCAGCC TGGCCAACAC GGTGAACCCA CTCTCCACCA AAANTACAAA ATTTAGCTGG ATGTGGTGGT GGGCGCTCT
 AATCCAGCC ACTCAGGAGG CTGAGGCAGG AGANTCACTT GANCCCGGGA GGCGGAGGTT GCAATGAGCA GAGACGGCT
 GGACGACAGA GT

343

SEQ ID NO:1461: (Length of Sequence = 343 Nucleotides)

TGGGAAGATC AGGTCCTACT TGTTTTCTG TCCCCTCCAG CGCTAGATCA ACACAGTGT AAATTAGTTG AATTTTCAGTG
 GAGGAGATAA GACAGAAATG AAATCTGTGA AGATTCAGAC TTTCCTCAAGT TAAAACCAGT CTTGAGTTAC AGATCAAGAT
 GATGCCAGAA ATAACATCAC ACTGAAACAT CAGTCAAATG TAGTCATCAT GGCAAAGGCC AAATGTCCCT TTCTTTTTTT
 GCCTCCGCT GCCTGGGAAT TTAGCATCCC CTAAAGCCAC TCATCTGGGA CAGGATTTTA GGGTGTGTAC ATGTTTTTCA
 ATCTCCACAG GACCCAGCTG TGT

SEQ ID NO:1462: (Length of Sequence = 335 Nucleotides)

GGCATGGAGC AGGCAATGAC TTGTTTCATAG TCGCTGCAGT TATGAGCACC AGCTTGAACCT TAGGAACTCT TATAAATTTT
 TGTTTTCAAC CAAGTATTGA GTGTCTGCTA TGTTCTAGAC ACTGCGCTAG GTGCTGAAAT CTCACCTTCTA CTGAGGAAGA
 CAGGAACATA AATGGTGTAT ATCATGTGAT TAGAAGTGAT GCCACGGGAA TAGTGTGGGG CCTCTCCAGG GGGATCTNAA
 GGTAGGGAGA CCACACTTCT CCAGTGGTGG AGAGGGCAGA CAGCGTGTAT NGGGTCTCA AGGTCTNATT GCAAAGGTCA
 TGTTTTAGCT GTTCA

SEQ ID NO:1463: (Length of Sequence = 382 Nucleotides)

GGACCGCTTT CGGTTCTCTA GGATAAACAC GAGCATGCCC ACCACGGTGA AGGCGGAGGT GACAAACACC AGCAGCAGTC
 CCGGGACCAA CACCGAGATG GACACCTGCT TGGTGTCTAG GTAGGAGTTG GAGTGGCTCC CGGTCTCCGC CAACCCAGTG
 CTGTTTTTAC TGTCGAAGT TAACGTGGGC GAGATCCTAG CGTACAGCTG AGGGCAGATC TCGTCATTGG AGAGGAGCAT
 GAAATCCTTT CTAAAGAAGT TCACCGCGT CTCACACTTN AGGTCTCTCA TCAGCACTTC GGAACCCAAAG CTTTCTGNC
 ACTTGCTTGA AAGGCACAAT TGTCAGGAG CACTNCCAGG GGTTCGGTG GAGGTCTAT CT

SEQ ID NO:1464: (Length of Sequence = 187 Nucleotides)

AANGACCTCA TTTCAAAGAA GAGCGTCTC CTGACAAGGG ACGTTTCCCA GAGAGGAGAC GTGTTAGTGC AACAAAGACC
 AGGCCCTGNN AGCCACGAAA GCCCTCCAGA TGCCTTGAGG ACGCGTCTN TAGCCGNGTG GGCCACGNC GGGTGGGAC
 AGACAATGAC AAGAGGCAAG ACAGCCG

SEQ ID NO:1465: (Length of Sequence = 276 Nucleotides)

TTTACACAAT CAGTATAATA CTGATAGGAA AACTTGACTG AGTTCAGAAA ANGAAAACGA AGTAGAGATC TCACTTGCAT
 CAGAACAAAA TGTCATCTA TTAGCAGATA ATATTCATCA GTATTTTTTG AAAATACAAT ACCACANGAA AGAAACAGTG
 GACATTTGGA GGGCTTTGAG GCCTGTGGTG GAAAAGGAAT TATCTNCCG TAAANCTAG ATAGAAGCAT TCTCAGANAC
 TTGTTTGTA TGTTGCCCT CACTGACAG AGTTGA

SEQ ID NO:1466: (Length of Sequence = 375 Nucleotides)

GGGGTTTINAC CATGTTNCCC AGGCTGGGCT CAAGTGATCC ACCCTCCTTG GCTTCTCAA GTGCTGGGAC TACAGGTGTG
 AGCCACTGTG CTTGGCTGGT TTTTNTTTT TNAATGAACA TGTTGCAAT CACGCAGAGC ACCTNINATT CTGCATTNAC
 TGGGTTATAA CAAACATTGT CATCTGACC TACATTTAAA AGGCTCTGGT GTATTTTAA TATGCTTTT CAATTTAGTA
 ATTAATTCTA ATTTTCTTT GAGCTGAGAT GTTATTCATT GTTCTCTAG AGTTGCTTTT ATTTGTTTAT ATATGTTTCC
 CTAGCATGT TTTTGTATC TCTTAGTTAT TAGATACCTG AACATTTGAC ATGG

SEQ ID NO:1467: (Length of Sequence = 319 Nucleotides)

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TTTGGTGGAG ACGGGGTTTC ACCGTGTTAG CCAGGATGGT CTCGATCTCC CGACCTCATG ACCTGCCCGC CTCGGNCTCC
CAAATTGCTG GGATTACAGG CGINACAACC GCGCCCGGCC GGTAGCAATA GTTTTAATTA AGGTCTTAAA ATCATACAAA
AAGGAATT

SEQ ID NO:1455: (Length of Sequence = 342 Nucleotides)

AATTTAGGTA GATTAGCATT CCCATGTAAC TTACCAGAAT CAGAATGAGA ATTCAGAAGT CACCTGANIT GGCGGGGCAT
GGTGGCTCAC ACCTGTAATC CCAGCACCTT GGGAGGCCAA GGCAGGCAGA TCATCTGAGG TCAGGAGTTC GAGACCAGCC
TGGCCAAAT AGTGAAATCC CGCCCCCTACT AAAAATACAA AAAATTAGCC AGGCACCTG TCCACAGCCC CCACACAGAC
TCGAGGGGCC CCCATCTCCT GTTCTGAACC CAACAGGGTG GTCCCACTNT GGGACCACAA ACCAGGTATG ACTGTTNAG
AAGCAGGCTC ACTACCAGGN TA

SEQ ID NO:1456: (Length of Sequence = 296 Nucleotides)

ATCTTTGACC TATTAGGTGA ACAAATGAAC CTCACAGGAC ACACAGTATT TTTTAAAGGC AGACTCGCTC TCTTTTTTGC
CAGTNAGCAG TTCTAGCTAA CCAAGTTACA CACTGTGGGT ATTCTGCCT GCCTCTTGAA TACAAAGGCC TAGTTCAAGT
GTTGCTTTTT TNAATTTCAA TCAATTTTTT CTCTTTTCT TTTTGAGATA AAATATTAA AGTACTACT ATATATATAA
AANCTCAAAT CAACTTTTCG GCCTCTCCT CGTGTACCAG GGAGTATATT CTGACG

SEQ ID NO:1457: (Length of Sequence = 314 Nucleotides)

GAGGATTCAT AAGTAGAATT TATAAGAAG TCCAAAGAAT CAATAACAAA AAGACTGGCT ATGGCCTTCG NAGAGCAGCT
GCTGTCTGG AAATCAGAGG ACAGTGAAGG GAAGTCCGAA GATGAGCCTG ACACCATTC GACATCCGTC CTCCTGCAGG
TGGTGGAGCT GCTAGGAAAC TTCTTNGGA CCACGGACAT GGCAGCCTGC NTGAAGGAGC TTGTTTTCCA TCTCCTGGCA
GAGCTCTTAC GCACGGTGCA CACCCTGGAG CAGAGGCGGC ACCCCGCTGG CCTGINCTCC TCANTCGCCC TCCA

SEQ ID NO:1458: (Length of Sequence = 254 Nucleotides)

GTTCAGTCA CAGATGTTTC ATTATCACTA TTCAATATTA TTAAGCATCT AATAAGTATA AGGATGCATG AGTCAAGGGT
CCCTACCTTC AGGTCCGAAG CAGGAAAGAG ACCAGATCCT AGAACAATAG GACATGGTAC CCGCTGCCTA GACGGAATTT
AGAATCCGGC TGGGTGAAG AGATTAATGA GCGAGTCATG CCATCAATGT GCTGTAACTG AGGTCTTAAA AACCACCCAG
CCGCGACACA AACT

SEQ ID NO:1459: (Length of Sequence = 343 Nucleotides)

AGAAAGGCTC AGGGATTAAG TAAAAAGGCT AGTACATCTG GGCTCCATTC CATTATTTAG TCATCCAAA GAAGTGAAGT
GGAGGATAGT GAGCATCTAG TATATGCCAG GCACTAGACT GGCTGCAGAG GATTCAAGAG TACAAAAAAC AACTTTGTGA
CCAATTTAAT TTGAATTTAC CAAGTTGAAT GGCAAAAATA TCTTAAAAAT TTAGATGCCT TGATAAATGT AGTGGTATAT
TATGATAGCC ATTCTATGCC TTGAGATACC GTGTATTCTA TATTGTATAG TTGAGGGATT GAGGCCAGTT GGGAGGAATA
AATTATAGCT TGTGCTTATC AGG

SEQ ID NO:1460: (Length of Sequence = 348 Nucleotides)

ATTGTCAACA GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAG GACAATTTAC AAATAAGAA
TAGTAACATA GCTTTCAGCA TCCTGTGCTT GANCATCACA CATCTACAAG TCTTTCAAGT CTTAATGCAA CAGGAATGTN
TCTGGAGACC NGCAAGAACA TCAATAGAGA GCACTGATCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCNCAC
AACGNATTGT TAGGGAGGAT TTGGGAGAAG CAGCCCCCTT GCTTAATACA TINGGACCCC TTTCCCTTAA GTTGAGGTTC
AACCCFTGAA TGCAATAACT TGGCATAA

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SEQ ID NO:1448: (Length of Sequence = 366 Nucleotides)

AATTTTGTGT CCTGTAGGAA ATGCTTCCTT GGGTGTGTGT ATTATAGCCC AATCCAAGTC ATCCCTGAGA ACATCCCCAG
GTTGTAAGGA TTAGTCAGAA GTCATGATGA CTGTCTATA TAAATATTG GCTATTAAAC TAAATTAGT ACCTTCCAT
TTCTCCNCIT TCTTGGGCGG GGCAGCGGG GAGTCAGGG GAGGGGAAAT AGGGAACGTN CAATTGTINTT TTAAGTAATG
CTCATAAAAT TCTTAGNCAA AGATGATCTT GCCCTCCACC TTGGTGACCC ACCGCATAAG GGGTACATCT ATCTGGCCTG
TCTCTAGGCC TAGACAGAAG GAACAGGGAG GGTATTGT TAACTTT

SEQ ID NO:1449: (Length of Sequence = 234 Nucleotides)

GTGTGGGAG GGACCCGGTG GGAGGTAAGT GAATCATAGG AGCAGTTTCC CCCATGCAGC TGTCENGATA GTNAGTTTCT
CATGAGATCT GCTGGTTTAA TAAGCTTCTA GTGTTTCCCC TGCTGGCACT CATCTCTCTT CCTGCCACCC TGTGAAGAGG
TGCTTCTGTC CATGATTGTA AGTTTCTGA GGCTTNOCCA GCCATGCAA ACTGTGAGTC AATTAAACCT CTTT

SEQ ID NO:1450: (Length of Sequence = 220 Nucleotides)

GCTTTTNCCT TCCCTGTTTT GTTTTGTAACT CTAAGGAAGC AGAGCCTCTG AGACCACACA CAGCAGCGTC GCCGTCCCC
AGAGGCACCC CGGCCAGGAC GGCAGGAGA GGAGACCCCC GTTCTGTCAT GCNCTGTGTC CCCGCCACGG TGTCTCCGC
AGGGTGAGGC AGGAGGGTGG GTGGAGGCGC CACTGNTCCT CAGCTGGAAG GGCGGGGCAT

SEQ ID NO:1451: (Length of Sequence = 403 Nucleotides)

CCGCTGTTCA CCTACGCCCT GATTAAACIT GCCTTCCTGT CCTCCAAGAC CAGATGATGA TTATCTCCA CGTCTAAGA
GACCAAGGC CAATGAGCTA CGCAGCCAC CAGTCCCGGA ACCCGCCAAT GCTGGGAAGC GGAAAGTGAG GGAGTTCAAC
TTGAGAAAT GGAATGCTCG CATCACTGAT CTACGTAAAC AAGTTGAAGA ATTGTTTGAA AGGAAATATG CTCAAGCCAT
AAAAGCCAAA GGTCCGTTGA CGATCCCGTA CCCTCTTTTC TAGTCTCATG TTGAAGATCT TTATGTAGAA GGACTTCTG
AAGGAATTCC TTTTAGAAGG CCATCTACTT ACGGAATTCC TCGNCTGGAG AGGATATTAC TTGCAAAGGG AAAGGATTCC
TTT

SEQ ID NO:1452: (Length of Sequence = 353 Nucleotides)

TGCCTAGAGA GGGGCGGGA TTTAGAGAGC TGTTCTCTG CCTATCTGAT CGCCTCTCA GACACTGATC TATTAGTCTA
GTGCTGCAAT TACTTGGATT GTAATGTTTC CTGCAATTT TTGCTTTTCA AATCTTTTC ACCCTAACT GTAAATACGC
CAGGAGTAGG TAAAACTTA CAGGTAAACA TTGCCAAGAN ATAAGGATTT TNAITCTTC TGCTCAGTGG CATAACTCAA
ATCACATGAG ATAGATTCTT TTGCATCTGT CCATTGTATT TCTCTGAGGC TAATTACAG CACTTTGTCA CGTAGGNAT
TTTTTTTCCC CAGTGTCTCT ACTCTCCAAC TGG

SEQ ID NO:1453: (Length of Sequence = 258 Nucleotides)

GTGCCCCIN CTGTCTTCT GTNACCCAGA GAAAGCTTCA CAAGCATGCC TGNAAATNAG TTGCACCAT TATTACAGC
TGAAAGANTT GANTGTAAAG AAGGAAGTTT AATAGANCA ATAATNCAGC AGATTATTG ATGGGGAGGT ATCTATTGTA
GTTTGGCCAG TGAAGGCAGG TCATAGAGGA AAATTTAGGT AAGTCGGATT TNCCTTAAAA AGAGGCCCAA GAGTTAGTAC
CTCAGGATTT TGTTTTCT

SEQ ID NO:1454: (Length of Sequence = 328 Nucleotides)

GAGATGGAGT CTGCTCTGT CGCCAGGCT GGGGTGCAGT GGCGGATCT CTGCTCACTG CAAGCCCCGC CTCCAGGTT
CAGGCCATTC TCCTGCCTCA GCCTCCGAG TAGCTGGGAC TACAGGCGCC TGGCACCAG NCCAGCTAAT TTTTGTATT

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TTGGNATTTT ATAGTGTTTT ATTTATTATA TACTCTNCIT GTAATAANNT GGTAATCTAG TTTCCAGAAT CATGCAAATA
G

SEQ ID NO:1441: (Length of Sequence = 247 Nucleotides)

GACCCCGATA TTCCGGCATC ACATAGATAT CCTCCAGATA AANGGTGCGT CCCTTCCATG TACTGTAGAT GAAATAGTAT
ATCCCATAGC CCACCACGCA GGGCCCCAGT AGCTTCCCGG GCGCTGGAAG AATCTCTGCT ACCAAACAGT GATAGAAAGG
ATTGTNTCCA AAGCCATCTG CTCTCAGGGC TTCCTCAGT ATAGGNGTTT TTTCAAGNA ATAATCCATG CTAAGAATGG
GGTATTT

SEQ ID NO:1442: (Length of Sequence = 233 Nucleotides)

GATTACAGCC AAGTTCATGA ATACAAATAA AATAGCAAT TCCCTCATTC TCTCTTTTGT TTTCTGNTCA GAGAAATCAG
GAGATGGGAG CATTATGCTC AGAAACCGAA GAGCTCTTCC AAGAGCTCCA GCTTAGAGTC CAGGCTTCCA GAGCATGCAG
CCTCCTAACA CGTATGIGGT CACATGTGCA AAGACCTINTA TTACAAATA TTCAGAGCAG NATTTCTNTT AGG

SEQ ID NO:1443: (Length of Sequence = 288 Nucleotides)

AATAACAAT GTGCAGGTTT TTATACTGA TCGGAAGAAG GTTGACCCNC AGTTATCACC TTTAAAAAT GGTCTTAGTT
AGGCTTTCTC CTTTGTCTT TTTCCAGAAG AAACCTGGAG TCTGTCAAAT TTCACAAAT ACCCTGTTGA GATTTTCCTT
GGCTTTGATA AGGGTGAATT CACAGATTAA TTCGGAAGG AATTTACGGC TTCTAATCA AATTGTTCTT TCCAGGGGNT
TTTGCTGNTA TTAGGNCCT TCTAAAGGTT AACCTAACT TTGATTAT

SEQ ID NO:1444: (Length of Sequence = 208 Nucleotides)

GGAAGTGAGT CACAGGGCCA AAGCCCCCTT TNCCTCACGT GAAGCAACTC AGTAAGATGG CCGTGCACTG AAGCCTATTC
CCACACACCT CGGCACTGAT GGAGCAGTCT CCAAGGAAG GCTGAAAGGA CAGCAGGTGG TTGCCTTNGG GTCCTTCCTT
CCCATANCCT TAGAGTGCCA TTTTTCAGCA ATGGGTAATA GCATCAAC

SEQ ID NO:1445: (Length of Sequence = 239 Nucleotides)

CCCCGGTCTC TNGGACACCA TTTTCTGCCG CTGGACGCAA GGGTTTGTGT TTAGAGAATC AGAGGGATCT GCATTAGAAC
AGTTTGAAGG TGGCCCCGTG NCTGTTATTG CACCTGNTCA GGCAITTTCT TTGAAGAAGC TCCTGTTTTT TCCGGAGAAG
TCTTCTTNGC GGGATTTTTT AGAGGANGAG CAGAAGGNAC TCCTTTGTCA TACCTTGTGT GATATTTTAG AAAGTGCTT

SEQ ID NO:1446: (Length of Sequence = 243 Nucleotides)

TGCAGGGAAT TTNTGATGC AAAACCAGGA AACAATTTAT CTCCACTGGG AATACTTTGA AGAAGGGATT AGAGCGGGGC
TAGGGCAGGG AGGATCTNTA AAAACAATA TTTGCCAAAC TAAAAACACA TAGGCACACA TGGGNATTAT TTTACTTTCA
ACAAGTTCTG AAAGTAGTAA CAAAACCAGG GAGAGTTAAA AGAATAATTT AACACTNATG NITCAGGAAT GCTAAAGGAG
ACC

SEQ ID NO:1447: (Length of Sequence = 371 Nucleotides)

AGTTATAAAT GAACATCTGT TGCCTACTTA ATAGGTCATT GAGTAGCTGT GACCCATTCT TAATTGTAT GTAAGCATAT
TTTTTACATA TTGTATCTA CTTCATTTTC CCTTGAAGCT TGCCAAATG GTACACTTCA GTTTGAAGT ATGTCTCTTA
TATGCTGTAC CACCTTCTTA AAAATTGAAT TATCTTCTCT TCCACCTAGA TTGTCTCAA AGCATTGTGT TTTGCTGGAC
TTTCCACTCT TGACCATAAG ATGGTAGCAT TCCCTAAGGA TATTGCAGCA CAGTCTAATT CCACTGGTGT TCATCTACAG
TTAAATCGCA AATAAAAAAT AATAATAAGC AGCAACTGAT TGCTCAAGTT G

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CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTGTC AACTGTTTCC NATGACTTTG GACTTGGCCA
TGCAACTGTC TTTGGCCAAT ACAATGTGAG TTAA

SEQ ID NO:1434: (Length of Sequence = 249 Nucleotides)

GCTCCATAGG TCTAAGTTTG ANCTTTTCTA GAAAAGGATT TGCAGGACGA TCTGACGAAT CTTGGGCTTC CAAATTAGTT
CCAACAGTTC TAGTATTTTT TTTTTTTTTT TTTTGACAGA AGCAAATAAG TAAGTTTINAC TTTGTGATTA AAACAAAAGT
GAAATGCATT TAGTCCCAGG AAATGNCAT CTTTCTGCA TCTNACTTTT TTTTGTGTG ACCTCGAGNT TCTCTGTCC
TCTTCAGTT

SEQ ID NO:1435: (Length of Sequence = 201 Nucleotides)

GAATGGGGCC AATGGCACTC ACTGINTCIT CAGGCCCCCA CGGACGGCAT GCGTGGGGAA GCCTAGTCTA CTTACCATCA
GCACGTTGAT CTNTACACA GCATGGAGCC ATAGTTTACA AAGGACCACG GCAGGTCAAG GACAGGCCAC TAAAACTTTT
GGTGCTGGG ACATNACCCA CCCTCACCAN CATCAAAGAC A

SEQ ID NO:1436: (Length of Sequence = 312 Nucleotides)

GGGAAAGGTA TATTAACCTT CTGCATCAAA GATGTAACAG TCATGGGGTC TTGGTGGCCA TCTGGTCTGA GTTAGGTACA
GGACAAGAAA GAGTCAATTA ATCTATAATA AAGATCAATG ATTGAAAGAA GGGAGATCTG GTCTCTGTCT CTCTAGTCA
TTTACAGAAC AAGAGCAATG AGGAAGACCG TTATGCTATA ATCTAAGNAA CAGAATTGGA AATATGCTAC TGACTCAGTC
TCCAGGGGCT TAACTTCCCC CTTGGCATAA TAAATTTAAG GAGTCCTAAA ATTTTATTTT CCCTTACATT GG

SEQ ID NO:1437: (Length of Sequence = 294 Nucleotides)

ATTCCAATGG TAATACTAAC GAATTGTGCT ATCTAAATAT TGGATAGTAA AAACGTCAAC ATTTAGAAAA TGTATATCAC
ACAGGGAACC AATATTTTNC AAATTATCCA CATCTAATAT TAGGCAACCA CGCGCAANAA AAGACAGTT CAAAGTACAG
GAGAAATGGA TGGATTTTAA TGTGAGATAG TACAAGANGT TTATTGATAT AGTTTCAAGA TTCCATATG TAATAAACCT
TTAANGAAC TTTCACTTCT TGAGTTTGG GTATAGGAAT CCAAAAAA AAAA

SEQ ID NO:1438: (Length of Sequence = 311 Nucleotides)

GGCCCTTGA CTTTGTGAAT GAGCACAATG AAATGCCGCC TACTGATGCT TCTNATGATC AGAACTCTTT TTTAATAAAA
TAAATAACAT AAATCGTTGA ACATAATGTT CCNGTTGAAT GCAAANCAAA AAAAATATGG NAAACATTTT GNTAAAATTT
TTTCNGNVA AAACCATGAA CANTGGCTAT GATGAAGGTT ATTACATATG GAAAAA AAC TCACACAAGC ATATTGNT
TTGGCTTGAA GGGAAACCAT CATTAAATGC AANGCTAGGG ATCTTTTNG AAGCAGTTGA TCCTCAGGTT T

SEQ ID NO:1439: (Length of Sequence = 265 Nucleotides)

CGTGACACAG TTGAAGGAGT CGCTTAAAGA AGTCCAGCTG GAGAGAGATC AATATGCTGA ACAAATAAAA GGAGAGAGGG
CCAGTGGCA GCAGAGGATG AGGAAAATNT CGCAGGAGGT TTGCACATTG AAGGAGGAGA AGAAGCATGA TACGCATCGG
GTAGAGGAGC TNGAGAGGAG CTTNTCCAGA CTCAAAAACC AGATGGCINA GCCACTGCCC CGGATGCCC CAGCAGTNC
CTCTGAGGTG GAGCTNCAAG ACCTT

SEQ ID NO:1440: (Length of Sequence = 241 Nucleotides)

GTFTTACTCT TGTGAAGATA GCACTTTAAAT CCTAAATGAG CATGTAACTG GTGACAGATC CTATATCAGT TTTAATAATT
GAAGCAGATA GTAATACTA GATTATTGAC ATTTTNGT CATGTGTTCA GCTATTGCTT CAAACTTGCT CAAATTATAC

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TAGTGGCATA TGGACCGGAA AGGGTTAATT TAAAGGGGGG GAACCTCAAA AGTTTTTTTA AAAAAGAAAC TTGTCTGCCA
CAGTATGTTA CCAGTGTATA CCCTTCTGCC AGTTAGCAAA CTTTGCCTT AAGCCTTTT CCTCTAGGAT ACTCCCCATG
TTTCGGTAAT CTTGGGCATA CATTITTTAA GNATGGACCT CTTTGCCTTG TTTTGTITTC ATGCTGCTGT ATGTCCAAGT
ATTGTTAATT TCATAATAAG ACAAGAGTTG CTTTCTTTT TAATTCCTT TTCCC

SEQ ID NO:1427: (Length of Sequence = 207 Nucleotides)

TCAGGAATGA TAGTATCTGG GATGAACCTC TCTTAATAA GATTGAGGCC AGINTTGGTG GGTGINTGCG GATGATTGTT
ACTGGNGCAG CCCAGCATC ACCAACAGTT CTGGGAATTT CTCGGGCAG CTCTAGGGTG CCAGGTTTAT GAAAGGTTAT
GGCCAAACTG AGTGCCACAG CTGGATGTAA CTTNCACCA CTCCTGG

SEQ ID NO:1428: (Length of Sequence = 223 Nucleotides)

TAACATTCTC TCCAACCTCC CCAGGTCCCA TCAGTGTGA GAAGGAATCT AGGCCAGCTC CTGGGAGATG CCAGTTAAGC
CGCTTTGAAT CCTGTGCCCT TCCAATTGNC CTTTATAGCA GTCGATGTCA GGGATTGGGA CAACTTTCAA AACAAAGTCCA
TCAAAGTCCC CATGGGCACT AGGGGCTCTG GGAACCCAGT GTCGAGAGGC TTAGAGNCAT TGC

SEQ ID NO:1429: (Length of Sequence = 222 Nucleotides)

AAAACCAAGG AGCAAAGGGG AGACAGAGAG AAAAGTGGGA TGGATTCAAA GACATTGCAA CATAGAACTN ACOGAACTGG
CTTGINTGAG GTAAGGGNGG CAGGATGACT CACAGGTTTC TGGGATTATG TGCAACAGGT GGAAGGTGAT GCCATTAGCC
AGAATAAGGC TGTAGGCTNA AGGGGAGTNA AACTGGTTCT GGGGGTATAA CATTGATAGG CC

SEQ ID NO:1430: (Length of Sequence = 246 Nucleotides)

CAAAATTTCC TGTATCCTTT CATGGGTTT CTTTGTITG TTTTGGTAA AACATTAAAC ATGAGATGTA TCTTINAGTT
GTGTGTGTGG TTGANCTTT TTAGATACAT AGTCTCACTC TGTTACCCAG GACTGGAGTG CCAGTGGACA TGATCCACAG
CTCTCTGACA GGCTCAAAAC TCCTGGGACC CAAATGAATC CCTCCACCT NCAGCCCTCC CAAGTAGGCT AGGGACTACA
GATGTG

SEQ ID NO:1431: (Length of Sequence = 364 Nucleotides)

CTTNCACCTC GATGATGCTT CTATAATTTT GCCCTTTAAC AGAACTTTC AAAAGGGAAG AGTTTTTGTG AATGGGGGAG
AGGGTGAAGG AGGTCAGGCC CCACTCCTTC CTGCATTGTT TACAGTCATT GGAATAAGG CATGGCTCAA ATCGGCCACA
GGGNCGGTGA CTTGTGCCC CAGGGTTTTC CCCCAGTG CCTCCATTTA AAAGCATTAA GGCCGGTACG GCATCTTCAA
AACAGAGGCG TGGCATTGGA GGAAACCTT GCTGCTTTAG TCCCGATAGG GTATTTGAAC CCCGCTATA TTTTAAGGCA
TTTTAAATTC TCTTCCCCC ATTTTATGA CTTGAACAA TTA

SEQ ID NO:1432: (Length of Sequence = 208 Nucleotides)

GTCAGTAAAC ATGGATGGAA ACAAATTATT AGGTGTGCA AAGTGAAAA CACCAAAAT AAGATTTAA AAGAATGTCA
GGTATCCATA GAAAAATATT AATAGGCTTA ATACATATGT AAAANTTGGC GTCCAGGGG GNAGAGACTG NAAAGTTATA
TTTINATGG CTGAAATCCC CCCAANTTTA ACATAAAGCA CAACATTT

SEQ ID NO:1433: (Length of Sequence = 274 Nucleotides)

GGAAGGTTTT TAATGCATGA AGTATACTTG TGATCCTGGA GGTGGAATA GATTGAGTAA AGATAAAGTT TGGCAAAAT
GATTCTNTCC CTAGGATTTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT

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AGAGATTATG TCTTGAATCT ATCCTGACTT CAGCAAAAGA CAAAAGAACG TTGAAAACAT CCTATTTCCTA AATCGTTTAC
AGGAAGTTAC CTAAGGAGNC TGACAGATTG AACGGCTGCT ACC

SEQ ID NO:1420: (Length of Sequence = 326 Nucleotides)

GAAGATTTC TAGAAGCAAA TAGTGCCACC ATCCGTCATG AGGNTCTGTT TCTATAACGC TTGINTGTCT TINAGACTAC
GTAGGTGGTA GCTTATGAGT AGTAATGINC TTTTGTAGT AAATGTCACC AAATAAGCAA ATAAGAGAAA CATGAAGGCC
AAAAACTGTN TTACTATTCA GGAGAAAATG GACGGTTTAG CAACAATACA ATGTAGACTT CAAAATATGA AAAATCAAGG
AAATTNCTGT CATTGTCTTT AAGGGCCCTC AGAGAAGTAT TAATTTGTCC TTTATGTGAA TTTAATGAGA TCATGTGAAA
TGTATG

SEQ ID NO:1421: (Length of Sequence = 294 Nucleotides)

ACCCAGTACA GGTACTCTCA CAGGAGGCAC TCAGCAGGGA TGTAAGTACA GCAGGTAAGA NTCCACCTCT NTCCCTGCCT
GCNCCTGGGA TCCAGTATG GCCCATGTAT CINCOCCTATT TCCTCAGGCT TCCTGGACTT TTTNTGGAGG GAAAGAGGAA
CAGAAAGAGG AGCAGGCAGG AGAAGCAAGA GCTCCCGGGG GCTATGAAAG GTAACATACC TGGAGAGTTT NGGAGAGCGG
CGGCTTGTTA GAGACAAGGG GAAGAGACAG AACAGGAGT ATTCTAAGAA GCAT

SEQ ID NO:1422: (Length of Sequence = 306 Nucleotides)

GAAGGGCATA TTTAATAGCT GCTGCAACA TATGGAATAG TGCTTTAATC AGTGGTGAAC AAGAAATGTC CTGTTGTGG
TTATAAAAC AAGGGACATT AATGINCTTG TTCTGTACC ATAGTAATGT GNAAAAAAA ATAGTGGTTG NAATGGTGT
TAATTTGTAC AGTTTGTGTC AAAGTAGAAT GGNCAGATA TTTTGGTGA TAGGCTTTTG TCTTAGTTAT AAAAATTAGG
NCATTTGGTA TGATAAAGG NGAGAATCTT AACAAATGGG CACTGGCCCA GAAAATTNCA GGGTGC

SEQ ID NO:1423: (Length of Sequence = 274 Nucleotides)

TGTGTGTGTG TGTGTGTGTG TGTGTGAGAA ATGGGGAAAG ACTGGTCTAG ATAATATTTC AGGTACCTTC CAACACTAAA
ATGGTATGAT TCCAGCTTA CAAAAGCAA ACTATTTTAA TATTCACCAC TCAATATAGT GTATCAAGCT CTCGGTTTAT
GTTTAAGGGC TTAGGGNACA GCAGCAACTA TTCGTGGGCA ATTAATNCAA AAATCATGT TACCAAAAAG GCATGTTTAG
GNCCTGCAGG ATAGTGAAAA AGCAAGAACA GTCT

SEQ ID NO:1424: (Length of Sequence = 297 Nucleotides)

GGAGGATTAC TTGAGCCAG AAAAAAAAAA AAGCCTCAGG GGTTCGGTG AATGTTGTGT GGACTTCCTG GAGAACAGAC
GTTTATGTTG AACTGANITC AAGGCTGATA CAGCCAGAA CCAGGNACAA GGTGAGAAAC TGCTCGTTTC CGGGAGGCAG
GACTTCCTAA CCGGGAGGCA CTGCAGTACA CTTTCTGAAA CAGGTTTGGA GGATAGGGAA ATTCCTGACA GCCCGGGGGG
ATCCACTTAG TTCTTAGNA GCGGCCGCCA CCGCGTGA AGGCTCCAGC TTTTGT

SEQ ID NO:1425: (Length of Sequence = 276 Nucleotides)

ATTTTTTCAA GGATGGAAAG GTGAGAGAAA AATAAATAA AACATCTTTC AATAGTCTTT CTGTTAAAA GCAGCGTCTC
TNTGGGCTGG GGAGTAAAGG GTGTGGGGCA AGGGGAGTGG GGAGAGGCTG TAAACCTTCC CCCAAACCCC AGTTTTAGAT
CCTTTGGTTT CCTTCTCCCA GAAGATGENC AGAAGGGCAT NGTGGGNAAC AGCAGGGNGG AAAATATGGT GATGACAAAC
CCCAGATGAT CAAGGGGCTG ATGCTCCTGG GCGCCA

SEQ ID NO:1426: (Length of Sequence = 295 Nucleotides)

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ATAGACCCCT AACATGCATC ATGTATGCTA TATTCCAGGA AAGAGACCTC CTAAAGACAT TCAGAATCTC ATCTGACACA
TTTATAACCT ACATGATGAC TTTAGAAGGC CATTACCAIT CTGACGTGGC ATATCACAAC AGCCTGCACG CTGCTNATGT
AGNCCAGTCG ACCCATGTTT TCCTTTCTAC ANCAGCATTG GACGGTG

SEQ ID NO:1414: (Length of Sequence = 360 Nucleotides)

GTATACAGCG TGGTCCAGCC ACCCGACAGC GAGATGGGCA TTTTAAGAAA CGCTCTCGGC CAGATCTCCG AACCAGAGCC
AGAAGGAATC TTTACAAAA ACAGGAGTCA GAACAAGCAG GGGTTGCTAA GGATGCAAAA TCTGTGGCCT CAGATGTTCC
CCTCTACAAG GATGGGGAGG CTAAGACTGA CCCAGCAGGG CTGAGCAGTC CCCATCTNCC AGGNACATCC TCTGCAGCAC
CCGACCTGGA GGGTCCCGAA TTTCCAGTTG AGTCTNIGGC TTCTCGGATC CAGGCTNAGC CAGACAACTT GGGACGTGCC
TCTGCATCTT CAGACAGAAT TNCAGCCTG CCTNAGGAAA

SEQ ID NO:1415: (Length of Sequence = 314 Nucleotides)

CTCAACACA GCATTTGAAG TCTTAATATT TTAGTACATA CTATACTATC TCINCTTACA ATTGTTTTTT GTTAAAGAAA
CCATGTTTTT NATTTCAAAG AGTTTCCTTT ACTGTGGATT TTAGTGATTG CATCTTTGTT GATGGGTTAA GATTGTCCNN
TATATGATCAT TAGTNCCTTC AATGTGCTGT ATTCACTGCT GCCTCTGGGC TCCTAAACTG TGGAGGGCTG TTTGTCCCTA
TATTAATGG GGACAGATTG TCCTGCTTTT TAATTTTCAA TGCTGACTT TTACCCNCTA ACTTTTCCGT AGAT

SEQ ID NO:1416: (Length of Sequence = 370 Nucleotides)

TTCCATTTTT GCTCCTTCTC AGGATAATAG CAGACCGGTG ATCACAACCT TAGTTTTGAT GAGATAACCT CCTATCTCT
TAAAAATGGT CTCTATTATT TTCCAAGAGA AGACCAGTAA AACTAAACA CCTGCCCTGA TCTCAGTGTC TTAGATGTTT
TCCTGTCTCT CCTTATCTCT AGCAAACCTCC CCAGGTGCTT ATCTTTATTC CCATTTTATA GATGGGCAAC TGGGTAAAG
AGGTAAGCTT GGTGAGGTCA CTGAGATAGT GGGGAAAGGA GCTTGGTTCA CATCAGGTAT GCATTCCCCC AAGGTTCCAC
TGGGGCATCT GAAGGAAGGG GTTTCTGGAA GTGCAAAATA TAGGGTACTG

SEQ ID NO:1417: (Length of Sequence = 365 Nucleotides)

GACTCCTTCG CCAAGGGAGC CATCAGCACC AGTTGTCCA GAGCAGCCAC AACACCAGTG ACCTCCCTTC TGCTTCCGGC
CAATCCCGAC AGAGCCTCTT CCGAGTCTT GAGCTCTGG ATAGCTGCCT CAATAAGCA GGACTCGGGA GTGTGCTTCT
CCTCTGCCAG CTGCTGCTCT AGTGTACTT TCTCTCCAG AACTACCCG TGCAACACCT GCTCCTTAGA GGCCAGCAGC
AACTTGGAGT ACTGGCTGTG CTGTTCATCT CTTAGATGAA TGGGATGGTC TACATTCATC CATTTGGGAT TTTGGGCAAA
AGCCACCAAC AACCCCTTTT TTTCCCTCTT CAATCAAGCT GCAAT

SEQ ID NO:1418: (Length of Sequence = 354 Nucleotides)

CCAAATCCTT AAGTTTACAA AGCTGTGGA AAACCTTTGTG TCCTGATTTC AACAATCAG CTTTGTTTGA AAGATGAGCC
AAGCTCACAG AACTAAATTT TTATGTCATG CCATAAGCTG GAGAGGAGCC ATTTGGCTAC AGCTGCGGAA CTTTATTGAG
GAGCAAATGA AAGGCACATG GACGAGCAG CTGGTGCACT TCATGTTCTT CCTGCCCTGTG AATTGAATAC TGTCTGGTGA
GCAGTTTGG GTGGGTCAGG AGCTCAAGGC TGGTTTGTGT GGCTGACTAC GGATGAGCAC TGAAGTTGCC TCAAGAATT
AAGGGGTGTC CACANAGCC TCTTGGGGTC TTTT

SEQ ID NO:1419: (Length of Sequence = 363 Nucleotides)

GTGGAAAACG TGGAAATGAT GTGGCCACTG AAAGAAATTC AAGACAACCTG AAACAACCTG AGATTTCCAT TTTTCACTCG
TGTTTCTTA TGAACAATAA CATTGCAGAA GGGGAAATAT CAGAAAGTTG ATTGATTTTT AACCCAAAA TAGAACTTTT
TGTAAGCTAG GAAAGCATCT AAAATTAACA AGAATACAAA AATGCACTTT TGTTTACATT TGCTCTATTT AGATCTTACA

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GCAAGGCGNG AACCNATGAA TGGACTCCTT GTGTGAATTA TTGCATCTTC TTCCAAAGCA GGTTCATCAA GACTTTCACA
GAGATTCAAT TTINTTGAGA AGTAAGGGTT AATAGGAGGA TAGAATTGG TTCCNAATCT AGTNTAAAA GTGTCCAAGC
AAATCAAAAA GTAAGATATT TTAGGGGCCA TACCCACATC TT

SEQ ID NO:1408: (Length of Sequence = 388 Nucleotides)

CCCCGCAGCA CCACGAGCTG ACCTGCTCT TOGAGTGTCC GGTCGTCTT GACTATGTCC TGCTCTCTAT TCTGCAGTGC
CAGGCGGGC ACCTGGTGTG TAACCAATGC CGCCAGAAGT TGAGCTGCTG CCGACGTGC AGGGGGGCCC TGACGCCAG
CATCAGGAAC CTGGCTATGG AGAAGGTGGC CTCGGCAGTC CTGTTTCCCT GTAAGTATGC CACCACGGGC TGTTCCTGA
CCCTGCACCA TACGGAGAAA CCAGAACATG AAGACATATG TNAATACCGT CCTACTCCT GNCCATGTCC TGGTGTCTTC
CTGCAAGTGG CAGGGGTCCC TGGGAAGCTT TGATTGTCCC ATNTNAATGG AACGGCCAC AAAGAGCA

SEQ ID NO:1409: (Length of Sequence = 348 Nucleotides)

CAATGAAGTC CTTAAGCTTT GTTAATATGA GAATGTCTTT ATCTCTTCTT TATTTCCAAA GGACAGCTTT GCTGGTTAAA
ATATTCTGG TTAAGTTTTG TTTTATGATC TTAGCATATA TCATTCCACT CTCTCTGGC CTGTAAAGCC TCTGCTGAAA
GATCCACTTC TAGCCTTATT GAAACTCCCT TCTATGTTAT TCGNTCTCNC CTCTGTCTGC TTCCAACATC CTGCTTTGT
CCATAATTTG TAACAGATTG AATATAATAT GAATTAGNCC TCTTTAGACT GAATCTCATT GGAGNCTTTT CACCTTCTT
GTTTTGGGT ATTATNTCT TTTCACAG

SEQ ID NO:1410: (Length of Sequence = 370 Nucleotides)

GACTATTAT TCTGCCTTAA ATCAATGGCA AATAAGTCAA GATGACATTT TGTGAATGTA GACTATGGAT AACTCTCTAA
TAGATTGATG TAGTCATAAA AGGGGGTCAA GTAGATGTTT TNCGTATATG TAAGCAATAA TTTTCCCGTG TCTTATGAG
TATGGCTAGC GATTATTTAT TACATGCTAG ATGGGTCTT TGCAATGTGG TTCCATATAG GTGCAGAAAT TTCCTCAGCC
ACTGGAGGGA TTTGACCAT ATTTGTCAAT TGGATGAGCT GTTATTAGAT TGAAATCTAC ACATCATTTT ATTAAAAATT
GTGCCCTAGA AAACGCAAAG CINTTGACA ATGGCGATTA AAATTATGGG

SEQ ID NO:1411: (Length of Sequence = 385 Nucleotides)

GTCTCAAACT CCTGACCTCA GCGATCCAC CCACCTCAGC GTCCCAAAGT GCTGGGATTA TAGGCGTGAG CACCGCACCT
GGCCTATGAG TGGTCTTTTA ATTAGGAAAT TTACATTTT ACATTAGTGA GATTGGTCTT TTGGGCTATT GTACTTTTTT
TTTTTTTTT TTGAGATGGA GTCTTGCTCT CTCACCCAGG CTGGAGTGCA GTAGTGCAAT CTGGGCCAC TGCAACCTCT
GCCTCCTGGG CTGAGTGAT TCTCTGCCTC AGCCTTCCAA GTAGCTGGGA CTACAGGCAT NTGCCACGC ACCTGGGGTA
ATTTTNGTGG TTTTATGATG AGAATGGGG TTTTGCTAAT GTTTGGCCAG GCTTGGGCTT GAAAT

SEQ ID NO:1412: (Length of Sequence = 337 Nucleotides)

CCATTGAGAT TCCTCCTGGG CCTCTCGCC CCATTGCGA CAGATTGCT ACCTGCTCCA GCTCAGCGAC CCTCCCTCT
ATGATGAAGT GCATTGAAGA GAACAATGGT GTGGACAAGA GGATCAGCAG GTTTATTCTC CCCATCGGGG CCACCGTGAA
CATGGACGGA GCAGCCATCT TCCAGTGTGT GGCGCGGGT TTCATTGCGC AACTCAACAA CGTAGAGCTC AACGCAGGAC
AGATTTTCAC CATTCTAGTG ACTGCCACAG CGTCCAGTGT TGGAGCAGCA GGCGTNCAN CTNGAGGGGT CCTCANCATT
GCCATTATCC TGGGAGG

SEQ ID NO:1413: (Length of Sequence = 367 Nucleotides)

ATAAGTGGAG TGAAGAAATT AATGCATAGT TCAAGCCTAA ACAATACAAG CATCTCAGC TTTGGAGTCA AACTGAAAA
TGAAGATCAC CTGGCCAAGG AGCTGGAAGA CCTGAACAAA TGGGGTCTTA ACATCTTTAA TGTGGCTGGA TATTCTCACA

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GGACATGGAA GATGCTCCTT AAAAATCTCT GTAACCATTT CTTTATGTA CATTGAAAA TGCCNTTGG NTACTTGGAA
CTGCTAAAT ATTATTATTT TTACATAAGG TCACTTAAAT GTAAAGCGT TAAAAGACAT CTTTCTNGC ATTGCCATCT
TAATATC AGATATTACG GGATGTTAG

SEQ ID NO:1402: (Length of Sequence = 338 Nucleotides)

GTAATTGCTA TTTGATGTA TTTAAGAAA TTAACCCCTA AAACCTTAAAT TCCTTAAAC AATCTCAAAC AGAAGAAGCA
AAAGCTTGIN CTGTGCTCCA GGAAATAAGA TTCAGCACCA ATGAAAATAA ATTATAGAAA ATCAGAAGAT GGGTCAATAT
GAGTGGAAAA AACCTAACAT TTTAATTGTT TTINCTICA ATAATTGTTG TGAACCATCC AAAAAAGTAT GATACAAAAA
TAGCACTATA CTAAGAGCCA GATGACATGT CCTTAAAGCC TTAGCTCTGC AAATTATTGG TTGTGTAACA CTAGGGNACA
ACACTTAGNC TCTCTAG

SEQ ID NO:1403: (Length of Sequence = 381 Nucleotides)

GGAGTCTCAC TTTGTTGCC AGGCTAGAGT GCGANGGCGT GATCTTNGCT CACCACAACC TOCATCTCCT GGGTTCAAGC
GATTCTCTG CCTCAGCCTC CTGAGCAGGT GGGGTTACAG GTGCCCGCCA CCGCACCAG CCAACTTINT GTTCTCAGCA
GAGACGGGTC TTGCCCATGT TGGTCAGGCT GGTCTCGAAC TGACCTCAAG TGATTTGCCC ACCTTGSCCA CCCAAAGTGC
TGGGATTATA GCGGTAGCA CTTCACCTG GCCTCTAAGC TTAATCATTT CTAGGCTTTT NATTTAAAGT GAGAAACATG
TGACTCTTTC CTTCATTG GGACACTTTA AAAGGGGTTA TTAAATTGAC CCTAATTACA A

SEQ ID NO:1404: (Length of Sequence = 325 Nucleotides)

AGTCATCAG CTATCATTG TGTTAGTGA TTNATGTAT GGCCCAAGAC AATTCINCTT TTCCAGTGT GGCCAGGGA
AGCCAAAAGA TTGATACCC CTGACAGGAT TCCAGGATTC TTTGTAAAT NCTCAGAGGC CCTCTGTGCA TACTCOGTAA
GGACTATCCA CATCTTTAT TACTTTCAIT GGCAATAGGT ATAAATTTT ATTTGTGNGN TATTTTACTG NAATGTTACT
TGTTTTGCT TATTTACTGA TTGGGTGGA GGAAGTCAA GGATGAATA ATCTAACNT TTTTAAAAG GAAAGGCTAA
AAATA

SEQ ID NO:1405: (Length of Sequence = 349 Nucleotides)

GGATTATGAC TGAACGCTCT CAGCATGTTG GCCTTCACCC CTGGCGGTGG CTGGAACACA AAGATGCGC CCGCACGGAG
CAGATTCACA GGCACCTTGG GGTGATCTC CATGGTTAGG AAGAGTCGA AGCAGGCATG CGGCTGCAGG GAATGCAACT
TCTCTCCAG CTGCATCAGC CACCTGGGG CCAGATGCAC ATCTTCAGC ATCACCACC TGCCCGANTT TACAAGCGGT
GTTTTATTGC CTATCTGCT TNGTAAAGC CTCTTCAGA GCGGATTGA ATTGAAGGGA TCTTCGGGT TCTNCTCGGC
TNCAAAGGTC CTGACAATG TTCCCTTG

SEQ ID NO:1406: (Length of Sequence = 392 Nucleotides)

GGACTGCCC TTTGTTTATG AGACAGGGTC TCATTCTGTC ACTCAGGCTG GAGTGCAGTG TCATGATCAT GGCTCACTGC
AGCTCGACC TCTCAGGCTC AAGTGATCCT TGCATCTCAA CTCACGAGT AGCTACGACT ACAGGTATGC CCCACTATGC
CTGATAATT GTNCCTTTT TTTTGTGGT AGAAACAGGG TCTCATCTG TTGCCAGGC TAGTCTCAA CTGCTGGACT
CAAGTGATCC TTCCAACCTG GCCTCCCAA GTGCTGGGAT TACAGATGTC AGTCACAATG NCCAGCATGG ATTGTCTTT
TCAGACCCAG ACCAAGAAGC AGGACTTATT TGCCCAAGA CCAATCTAGG NAAAGTATA GCTGTGTGT CA

SEQ ID NO:1407: (Length of Sequence = 362 Nucleotides)

GTTAATTGGG NTTACAAGC AATAATTTCT CCACAACAA AACCAACT TGAAGNGAGT TGAAGNGN TCAATAGTGG
AAACAGTCG CTCAGTACTT TTNCTTCTG GNTTCATCT CTAGAAATTT NAAGTGTIN AGNCAGAGTC CACCTTTGT

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SEQ ID NO:1395: (Length of Sequence = 323 Nucleotides)

CTTTTTTTAA GATTTCAAAC TGGGTACAC ACTGGAAAAG GCTGGGTAA GGGCCGAAAT TTAATAAATC TGTACTGATA
 ACTAAAGGCT ACAGAGATTT CATATATTTT TTTTAACTTT TAGAAATCAG AGTGCTTATA AAATGGCTGG CTCATGGCTC
 TGTCACCAG CATCTCTGAC GCGCCTCCT AGCCTTCGTT GGTGAGATAA CCGGNATAG TGATTCCATG CGTAAACAAC
 AAGAATACTA AACCAATAAA ACTAGCTTAT CATGCAAATA TTANGGCATC TAGAAAGTCA GTTAAATAA TATTGTACATA
 GAG

SEQ ID NO:1396: (Length of Sequence = 384 Nucleotides)

TGCCCTCCGG GTTCATGCGA TTCTNCCGCC TCAGTCTCTT GAGTAGCTGG GATTACAGGC ATGCACCACC ATGCCTAATT
 TTTGTACTGA TGCCAGCACT TTCTTAGCAA CCCAGCTGG TGTCTAGTA TGCCCCCTCC AGTCCACTGT CTCGGGGCCC
 AGTTCAGCGC TAGGACTTGC TTAAGAGTTT CAGTCTTGT AGCCTATACT GCCTTTNACG TTTATTTAGA GATCTAGAGC
 ACTTTAACC TCAGTGGCAA GGTGTGGG AACTTGAGTT CGGACCACTG GGATTGGCAA ATTCCCCTCT GGCCTAGGGT
 TGCTTTAAAT GCTCCCTTCA CGTGTGGGCA ATCAGCTGAG TTTGGTCCAG TTTTCCTTTC TGCT

SEQ ID NO:1397: (Length of Sequence = 370 Nucleotides)

TTGAGTTTNT TCAGTGGCAT CCCCTGCTCC CCTGAGCACA CACAGTGTTT TCTATTTATG ACTGTAGTGC CAAGCAGAAT
 TTCCATGTNC TTGCTAGCTG CCCATTCTCA CCCCTCAGGG TCTCATACTT CTCCCCTGAA GCCTCCCAAG CAGTCAATGT
 GACAGGGACC AAGTATGTAC AAGGCAACAT ATTGGGTTCA AGTGCAAAC T AAGGGAACCA GGGCCTGTTT TTCTAGTTTG
 GAAGTTTTTC TTTATCTTAA GAAAGAGAC AGACCAAAC CAAGAAGATC AACAAATACT CTCTCTTTG TCATCACGGT
 GATGACATCA AGGTACTGAT ATTAACCAGA AGTTACAACA AGAAGGAATT

SEQ ID NO:1398: (Length of Sequence = 307 Nucleotides)

ATCAGCATTA GGTTTTACC AAAGTGATAC AAGTCTGAAG GTCTTCATCA GCAGTCTCCC TCATAGTCAG CGCCATACCG
 AAGAGGCTG TCCCTCTCAT AGGGCCTTCC AGCCACTNCT TCCCACAGG CCGTATTCTN CTGTGGCTGG GAGTGTGGAC
 TGATTTGTTA TGATGTGAGA GATCCNNGG GGTGTGAGCT ACCGCACCTG GCTGAACTTT CAAGGAGAAG TTTGTGCATC
 ANTTTTCAAA AAATTATGAT ATCAAAGAT AGCTGTGCC TACATTTGGG AAAGATACAA AAACCTG

SEQ ID NO:1399: (Length of Sequence = 380 Nucleotides)

CTGAATTATT GAGGATGAAT TGATAAGAC AGGTGTAATG AACTGAGGCC GGGCATTAGA CTGAGCAGCT GACTGTCCCT
 CAGAAACCAT AACCTTGCTA CCCGCATTGG GCAITGTGAC AACTGTTGAC ATCAATGCAG ACTGCAAGIN AGTTGGCAAA
 GCTGCTGATG TGTAGCTGA AGTTGTGATG GGATTGGAAG TGACAAATAC AGTTATTIGA TTTGGGGGCA AGGGAGINGA
 AATGGAGGAA GAGCTAACAG GTCTTGACAT TACTGGAGGG ATGCTTGGTG CAACGTTAGA ACTGACCTCA CTCATTCGG
 GGATGCACAA GGGATGAACA CAGCTCATT CTGTINAGGT AAGTTAGGG AATTAGAAGG

SEQ ID NO:1400: (Length of Sequence = 232 Nucleotides)

ATTATAGATA CACACCACCA CACCCGCTC CTCACATTAA AGTGGGNTA TGACCATGAA CACTTCGTAT TAATAAATGT
 CTCAGCACAC CCAAGCCTGA AAATCTGATC TAAACCTCCT TAACCTGAAT TCCATCCACA ATCCACAAC TNCCTGGNAA
 AAATNTNTCC CAGCTTCTCC TTCTCTAGC CCAAGAAACA GCCTTAACAG CGNGOGATT CATTCCTACA CT

SEQ ID NO:1401: (Length of Sequence = 349 Nucleotides)

AAGCTAAATT TATAATGAAC AGATTGAAGA AAAATAAAGA GCTACAGAAA GTTCAGGATA TCAAAGAAGT CAAGCAAAC
 ATCCATCTTA TCCGAGCCCC TCTTGACGGC AAAGGGAAAC AGTTGAAGA GAAAATGGTA CAGCAGTTAC AAGAGGATGT

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GCTAGTATC TCTCAGACAC TTGGTCGGTA GAAAAGATCC CGCACCATCC TCCAGGNTCC AATGGCCTTG GAGAGAGGGG
TGCAGGGCCC ACGGNCATTG CTGACTCTTT AGAACGTGCT GACATGGAGC CAGACCACTC GGCCCTGAGT GCGGCGAGGA
CCCTINTTINT GGATGTGGAG GAGCGCGGCG CGGAGCATTG T

SEQ ID NO:1389: (Length of Sequence = 399 Nucleotides)

GGTGCCCTGT TATCTGGTAA AAGAGCCACT TATGACCTCA GGTGCTACTT AACCTGGGGG GCAATTGTTT CTTAGGCCTA
GCAGATGTTT GGGATGACAC TAAAACTCA GTGGTGAGAT GATTCCTTA GCAAGATTGC TGAAGTTAGG TTTAGACGTG
GGAGGGTGGG TATGTGACCA ATGGTGCCAA TAGCGGCTCT TTATTGCTT TGTCCTCATT ACTGCCATCA GGAAGGTGCT
ACTGGCCTCG AGCCAGGGTG TTCATAATCT GGCTTGGGT TAACCAGACA AATAGAATT CTTTTCCTAG ACTGTGGCT
TTNTGGAGGT TGGCAGCTC TATCAGAGN TAAATTTCC CAAATCCATT TACCCAGTAT ATTCACTACA ATTTTTC

SEQ ID NO:1390: (Length of Sequence = 381 Nucleotides)

GGATTGAGGT GAAGATACAA CAAAGAAAGG AAATTGAACG GAATTATTAA GAGGGTCAAG TTGATAGGC AGATAAGACT
AGGTATCAGC AAGACATTTC AAACAAAGG AACATTATGT AATTTTAA AAAAATACAT GAAAATAATA TTTAANCAAG
GAAGGAATAT GATAAAGAN GGATAGTTAG TAAATTTGG ATAACATAA GATTATTGAA TCTCCAGTCG TCAAATTTAT
CCTAAACTAC TGGGGAGAGG TCTCATGTCA GATTTTGATT ATCGAGAAAG AGGGGTCAAG AGTATAAGNG AAATTCCTTT
TTGTTTGAA CTTCCAGTGT CCNCTATTG TGGGCAAATA TCAAATTCAA ACCAAATATA C

SEQ ID NO:1391: (Length of Sequence = 327 Nucleotides)

GAAGAAGTCC TTCTTAAGCA AGGCTTACAG ACTCCAGGG AGAACAAAT CTCTTTATCT CTCTGGGGTT TTAGGACCTT
CATCAAGTCA TAGAATTGAA ATAGAGAACA TCAATTGTC AACTTTTAA TTTAATAGT TTTGTAGTA CATAAAAATC
ATGTTATGAA TTATTTTGT GTTTTAAATTA TAACTTTTT AGCATTITA CCATATCTT AAAAATTAAA AATTATGAGT
NCTGAGAAAG CAGTGAAATC ACATATAGGT ATTTGATTAA CTTTATGTG ATCTTTTACC TCAAGCTAAT GTTCTTAA
ATCAAGG

SEQ ID NO:1392: (Length of Sequence = 223 Nucleotides)

TTTTTAAATA TTTAAACAA TTTTATTCAT GAAATATGC TGTACAATGC ACTCTACACA GCCTCGACAC GGCACACAG
CACACGACA CTCTGACGC ACGGCCACG TACACTGCCT ACGATACGG CCGGGGACGC CGCGCCACC GCCCGTCCG
GCCGGACACT TATAAATATG GGAGAAGGGC CAGAACNGC GCGGAGAAAG GGGCGTCGGG GTT

SEQ ID NO:1393: (Length of Sequence = 296 Nucleotides)

GAAAGTTAT TATTTCCCA TGINTTTTAC ATTTCATTT GGAAATATCA TTCTGACAG AAATAGNTAC ATTATACCTT
CGAAAGCAGA AAGATCTTAA TTAATTAAAA CAGTTTACAT TTACCTTAC ATTAGGTCG GCTGGCTAAT TTCAAAGGAT
TAAAAATTGC ACCNATTGG GCCAACTGGG GTCTGAATA ATTATCNGG GTAAAAGTAT AATATTTTAT ACTTTATACA
TTTTGCTTCA TCACACATT ACITTCACCA CAGTGNICAA CTTCACATT AAAAAG

SEQ ID NO:1394: (Length of Sequence = 281 Nucleotides)

ATCTTTGCAT CCTGGGACG ATTTCCAGTT GAGCATGGTG AATAATCTTT TTGATAGGCT GTTGGATTG AGTTGCTAGT
ATTTTNTGG GCATTTTGC ATCTGNTTC ATCAGGGATA GTGGCTTCA GCITTCCTTT CGTGTGTGTG TGTCCCTGTC
TTGTTCTGGT ATGGGGTAA TATTGGCCTT GTAGAATGAA TTAGAAGAA TTCTTTCTT TTTGATTTT TTGAATAAT
TTAAGAAGAA TTAGTATTAG TTCINCTTAA AATGTTTGGT A

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SEQ ID NO:1381: (Length of Sequence = 273 Nucleotides)

GCCACTACAC TCCAGCCTGG GACACAGAGC AAGACTCCCT CCCAAAAAA AAAAAAAA TTATTAGAAA GAGGAAGAGA
 GAGATGNCAG AGCCTTTTAC AGTTGGGTGT TGGGNGTTAG AGACCCAGTA CCCCAGCCTG ACATACCTAC AGAAGCAGTG
 AATTTACTTA TTTACTGTTA TGAATAAAT AGATGCTGCC AGCCGTGCAC AGCAGAACT ACTATTGANT CATATGGTTT
 TAGCCTTCAC CTTTAAATAT GTCTAATTAT ATG

SEQ ID NO:1382: (Length of Sequence = 296 Nucleotides)

CTCCACAGCT GCCACATAGA ACAAGCAAAT CTGACATCAC AGCTCTTTTA AAAATCTCCC AGAATTCTAC ACTGGAATAA
 AGATCACCCA GTAACTCAG CTATGTTGAT TCGTAGGAAT TTCTCCTTGG AGTTAATAAT AATCATTAGA AAAAAATAC
 AGGAAGAAAT AACTTCCTCC TATTCTTATT GTGATAAATT GTAACATAG CAGACATTCG TATATAGATC CTATAAGCGA
 CAAGAGGGAA AATAGGATTT GCAANITAAG CATCTGGAAT AAATATTTTA GGAAAA

SEQ ID NO:1383: (Length of Sequence = 293 Nucleotides)

CCAAGGACCG GCGCGTGGG CTGCTCTGGG ACCGCTTCGT GCGGGCTGC CCGCCGACT GGTACGGAGG CAATNACCGC
 TCGGTCATCT GCTCTGACCA CTTTNCCTCA GCGTCTTTC ACGTCTCTTC GGTATCCAG AAGAACCCTG CTTCTCCCA
 GCGNCTGAGG CTGGTGGCAG GCGCGTGGC CACCTGCAN CNGGTGCCC CCCCAGCACC TAAGAGGGGA GAGGAGGGAG
 ACCAAGCAGG NCGCCTGGAC ACGAGAGGAG AGCTTCAGGC AGCCAGGNAT TCT

SEQ ID NO:1384: (Length of Sequence = 378 Nucleotides)

GGTGGTTTTG ACATGTAGAA AATAAGATGG AAGGCTGAAC TAGGGCAGTG GTGTTGGCAA ATAATCAGAT TTCAGGAATA
 TCACAAAGTG AGGNGCCAG GATTCATGAC CATTTNATG TAGGAATAAG GGAGGAGCCT AGGATGACTC CCCCAGTTT
 CTGGCTCGAG TAACCTGGAT ATCAACAAGT CATTTAGCAA AATAGAGAAA ATAGGAGAAG CAGCAATTG AGATAGAGAT
 AGAGGCAATA TAAAGNNTTA TATATGACC ATGGTAAATC ACCTAAATTC AGAAAGTGT AGAAACTTG GGTCTGGANC
 TCAGGAAAGA CACTGGATAT GTAGATTGG AAAGTTATCA ATCTCAAAGT GATTGCTT

SEQ ID NO:1385: (Length of Sequence = 204 Nucleotides)

TCATTCTTGG GTGTTCTCG CAGAGGAGGG NITTGGCAGG GTCATAGGAC AATAGTGGAG GGAAGGTCAG CAGACAAACA
 AGTGAACAAA GGTCTCTGGT TTTCTTAGGC AGAGGACCCC GAGGCCCTCC GCAGTGTTG TTTCCCTGGG TACTTNAGAT
 TAGGGAGTGG TGATGACTCT TAACGAGCAT GCTGCCCTCA AGCA

SEQ ID NO:1386: (Length of Sequence = 238 Nucleotides)

CCCCATCATG GGCAGCCAGA GCTCCAAGGC TCCCCGGGC GACGTGACCG CCGAGGAGGC AGCAGGOGCT TCCCCGOGA
 AGGCCAACGG CATGGAGAAT GGCCACGTGA AAAGCAATGG AGACTTATCC CCAAGGGTG AAGGGGAGTC GCCCCCTGTN
 AACGGAACAN ATGAGGCAGC CGGGGCACT GCGATGCCA TCGAGCCAGC ACCCCCTAGC CAGGGTGCTG AGGCCAAG

SEQ ID NO:1387: (Length of Sequence = 295 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTANITAG GCAAGAAGAG GTGTAGTAA TTGAGGAAAA ACTGACAGAT GCTTTTCTTA
 ATACCAAAAT TGAGCTTACA ATTAGGAAT GAGTATGTGT AACAGGNTAC AGGTGACAGT GAAGATAGAA GAACCAAGT
 GACCACAGAC TCAATGTGCT CTGTAACATC GCACAGTTTA CCCAGCATGA CTTTCCTTAG GAGGCCCCCT CCTCACGCTA
 GAGTAAAGT CCCAGTTAAG TGAAGCCTAC CAGAAGAACT AGTAGAAGAA GCTTT

SEQ ID NO:1388: (Length of Sequence = 201 Nucleotides)

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AAAGGAAAAT ATAAAAGAAA ATAAAATCTC ACATTGGTGC TTAGCAGGAG AATTTTAA A GACTTACAAA TCAACAAGCT
 GTTCAAATAA ATAATGAATG CTGCAGCTGG CTCCTACATG GGGCTTINAG TGTCCCANIA GTAGCAGATG TCCCAGTCT
 ATAAAAT

SEQ ID NO:1375: (Length of Sequence = 338 Nucleotides)

TGCATGGAAA CTTAATCTAT TCAGGTCCCA ACTTTCAGGC TTCTCTGCTC TGACAAGTAC TAGAGGCCAA TATGATAGAC
 TAGTCTGAGT TGGATGCAAG TTAGCCATTT CCAGGAATGA TACCAGGATA AGTATAATGG TCGTGAATAT AACCGGATTT
 TAAGGGAGAA TGATTACACC TGGAAACAAA CTGTCAATAC ACAAGTAACT AGTTGTAA A GATTTCTAAT TTTGACCAAA
 GATTTTTACT TTCCTGGTAT AGAAATGGAA ATAAACATTN ACACTTTAGG TTTTGAAAGC AACCACTCC TAACACGGTT
 CTGAGTTGGG GGCCAACA

SEQ ID NO:1376: (Length of Sequence = 307 Nucleotides)

CAAGCCTCCC TCAAAAAAAT CCCAGAGTA ATGAAAATAC AAAGTCTGCT TGTTCAAAAT TATGGTGCGA ATAAAAAGG
 AAAGGGAGGA AGTGATGGAG TAAAGTTCAG ATTAAAAATA AACGGAAAGT CACAACAGTC GAAAGGTGGA AAAAAACCGC
 AAATGCCCAT GANCTGATGA ATGGATAAAC AAAATTGGT GTGTGTGTAT ATATGTGTAC AAACCTCCT TTTATGATGA
 AATAGTATTT CATGTGTGT GCACATGTN CACACACANT TTAATAGTA TTTCGTATA AAAAAAG

SEQ ID NO:1377: (Length of Sequence = 353 Nucleotides)

TGAATACAC TTGTGAATAC AGTGTAGG ATACATTAAC AGTTTCTGA GTGGGCTGCT CTTTTTCCT CAATACGTA
 TATATTTNN TTAAGCTCTT CTTTAAAGA TAAATATTT TCATACTTCT CTTAAATCCT CAAGGATTAA CTCTGAGTCA
 CCATTGTGG TATTTTAAAT CTTTTTAAAT AAATCTCTGT ATTTGCACT GCATCAAAAC AGTAAACAT TTCACAGGGT
 AGGATCTGAT GACCATTTTA TAATCAACAT TTTTAGGTAC CACAAGAG ACTTTATGAG CATCCACTGA AATTATGGGC
 ATTATGTCAT ATAAATATCC AAAAATCCAT TTT

SEQ ID NO:1378: (Length of Sequence = 315 Nucleotides)

GATTTGGCAA ATATTGGGT GAGATTGAA AATAAATAC ACCACTG CACAAGTTAA TGTGAATCAA GCATCTGTTT
 ATTTCAITCA GTTTATGCCT TTTTCTTT TTTTGTGAG TGCAGTTGGG GTCACAGACT CTCATTGTA CAAGACACTT
 TAAAAGCAGG AGTAGAAATT AGGCTGGT TTTACAATA TTACAGGAAC TGTCAATAA AACTTCAAGT GGATCAGTTT
 ATTTCTGATT TAACTGGGG ATAAACAGTG TTCAATATTT TCCAAAAGAT TCTCCCATTA TAGAAGTCCC AAAAG

SEQ ID NO:1379: (Length of Sequence = 352 Nucleotides)

ACCGCAAAT TTAGCTGTTT ATTAGGTGC AAGTCTCTCC TTCTCTCCCT GCTTTCTCTT TCTNCTTTTT CTCCCCACAA
 ATCTCTCAA AACACATACA AAAAGAGAAA ACTAGAAGCA AGATTGGGTC AAACATGAAG AACACAGAAA GCNTATTAAA
 TAGCTAGCTT TAAAGGGCTC TTTTTCAGTT TGAACAAAAG TAAAACGTTT TCAAAAGCAA AAACAGAAAA CAGAGCTTCC
 ACCAGATTG TGCAACTTAA TGAGAGGAGG TTAGTGCTGA TAAACCCATT GTGAAATCTA TTATAAAGTG ACAGGTTTTT
 CAAGCAAGGA AATCCAATCC AGTTGGGGT TG

SEQ ID NO:1380: (Length of Sequence = 261 Nucleotides)

AAAAATTTAG TGAAGACGTG AATAGATATT NCTGCAAAGA AAACATACAA GTGGTCAATA GGTATATAAA AGGTATTCAA
 TATCACTAAT CATCAGGGAA ATGCAAATCA AAACCACAAT GAGTTATCTN CTCATACCTT TNATGATGGC TAATATTAA
 CGAGAGATAA CAAGTGTTA TGGGGGTGTG GNGAAAAGAG AATGTTGAA CACTCTTGGT TGAAATATAA GTTGGTAGAA
 CCATTATGCA AAACAGTATG A

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CTGGGACAGA GACCTTTGCA TTGCTCCATG TGTGGCTTC AGCTGGGACA GAGACCTTTG CATTGCTCCA TGTGTTGGGG
 CAGGTCCTCC ATTTCAATCT CCTCTGCCCT AATTTAATAG CCATACCTGT GCTATTTAT ACCTTTAAAC CCTAATCCTT
 TTTCGTAAAT TGTGTTACAT TTTGCAGAGT GCCAGCATT TACAATGTGT CTTTATATG TCACAGAGGT CATCATTAAG
 TTAGACCTTT GGCTTCATGT GTCTCCCGAG AGATGGTTTA TAAATTTGTC ATNCTTCTGG CACAGGTGGT GTGGCTTAGG
 GATTAGGACA CAGCCTGCCT GAGTTCACAC CTCATCTCTC CCACCTAACA CTGATAATT

SEQ ID NO:1369: (Length of Sequence = 319 Nucleotides)

ATTTCTGGTC TAAGTTTTAT TATTCCTTT CTCTGCTTG TTTAGGCTG ATATTGCACT TCTTACTCCA GTTTTCTAAG
 GTGGAAGCTT CGACTATGTA TTTCAAATCT TTTTNCCTIN CTAACTATG CATTCAATGT TATAAGTTTC TGTGAAGCAG
 TGATTTCAAT GCATCCACA TTTTGATAGG TTATATTTCC ATTTAGTTAC AAATAATTTA AATTTCCCTT GAGATTTCTG
 CTTGACTTA TGTGTTATTT GGAAGTGTAT TTTTATCTC CAAATATTTA GAGATTTGCA GCTGTCTTTA TGTATTAA

SEQ ID NO:1370: (Length of Sequence = 343 Nucleotides)

GGAAACATA AATNTTGACA AGTAGTTCAA GACTGTTGGG ATAACTTAG CTAGAGTGCA GGTCACTAAT ACCCATCTTT
 ATAAGGAAGC TGAAAGGGA AGTATGAGGA CAGGGAGAAC AATGACTTTN TCTCTCAAGC TTGACTTAA CCACCAGGAA
 AGTCTTAA GCAAAGCCT TTCTCAGACT CTCACCAAC CATAAGAGTC AGAAAAATGG TCGTTTTCAA AGGAGTAGAA
 AATCTGTAC AAAGTAAACA ACAGCTGAAG CAGGAAAGN ACATACATTT NNTCACTTAG TGGCAGCAG GCAAAACAGA
 ACATAGGGCC AGCTTGGTTA TTT

SEQ ID NO:1371: (Length of Sequence = 295 Nucleotides)

ATTTCTNCCT GGGCGCGAT GATCTGAGCA ATGCCCCCA CAACTTGGT TTTCACTACA ACATGTCGT CATCAGCTTT
 GCCAAAAGCT GCCTTCTGGG CTGCACGGAC AAGATTGNT GAGGCTCTTT TCACAGCATT TCCTGCCGCC TGTAGCCGCC
 TCATGGCCTC TNAATCCTGG TCGGCCTTCA CCTTGCAGGC CACCAGCAGC TGAGCGTGG AAGCGCGAC CTGCTTGGCA
 GATGAGATGA GCTTCTCTC GCTGGGTGT CCTGAACGG AGGCATTGGC CGCT

SEQ ID NO:1372: (Length of Sequence = 340 Nucleotides)

TTTGCITTC GATAATGTT CTGTACTT TATAAATGCT ATCTGTGTA TCTCCTGTAT AATTNACAAT GTTTGCATGT
 AAAAAACAAA ACCCATAGAC CTTAAAAAA AGAAAAAAG AATATACAC TATACATAGG CACAGCTTAT GCCCAGAGCA
 TAGCAGGTGC ATAAACACT GTTGCTATAA ATGCAAGAAA AAGTCAATTT AACCACAATC ACATTTTTTT NCATAAGNEN
 GTCTGAAATC TATACAATAT ATACATCTAT GTTCAATGT GGAAATAATA TTCTTTTAAA TTTCAAGGCG TGTATATACC
 CTGCAGGCCT GCATAAATG

SEQ ID NO:1373: (Length of Sequence = 315 Nucleotides)

AATCTGGGG GTGATTTAGA ACTTAGAGGC ATCTCAAAA TGGACCAAGC TAAATGGTAG CCTTTATTIN CTGTAATGAT
 TCACCATGGG AAAATTAGTA ATCTTTTAAA CTCTTACTT AATCTTATAT GTATTCCAAA TTINCTAAA AGAAATTAAC
 CTAGAGGTTT TACAGAATC CATTTTTTTT TTATTNCCA GAAAGGAAA ATTTATCTGT NCTGTNATTT TGTAAAAAT
 CCTATTCCAG CTACTACTAT GGAAAAAGGA AAAGAAGAAA GGAGGAAAGG AAGGGAGAGA GGAAAGGAAG GGACG

SEQ ID NO:1374: (Length of Sequence = 327 Nucleotides)

GAGCCAGTGG TGGCCCCAA CAGCCCAATC TGGTACTCAG TCCAGCTAT CAGCAGAGAG CAGATGGGAC AAATGCTGAC
 GCGGATCTG GTGATAAGAG AAATTCAGGA GGCCATCGCA GTGGCCAATG CAAGCACTAT GCACTGAGAT GCCTTGGCCA

SEQ ID NO:1362: (Length of Sequence = 358 Nucleotides)

CCATTCAATC ATTCAATCAA CAATATTCAT TCAACAAATG AAGCAAAGGA GCACACAGCC AAGTGATGGA GCAAAATCAC
AAATTAAAG GTAATTCAGG CCAGGTGAGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCCGAGG CAGGTGGACC
AGCTGAGGCC AGGAGTTTNA GACCAGCCTG GCCAACATGA TGCAACCCCG TINTACTGA AAATACAAA ACAACAAAC
AACATAAAAA AATTAGCCAG GTATNGTTTG CAGGCGNCTG TAATINCAGC TTAGTCAGGA GGCTTTGGCA NGGGCTTCAG
TTAGCCAAGA TCGGACCCTT NCACTTTCAG CCTGGGTA

SEQ ID NO:1363: (Length of Sequence = 312 Nucleotides)

TATTTAAATA ACGTGCAATT TCATAATCA GCACATTTAC TAGATAGGTA GGATACTTTT NATCCATTTG TGTGTTAAAA
AATTAGCGCA TGTTCCTCTT TATGCCACT TGTATTAGCA GAATAGTGT TCGGATTCC CTGAATGNT CTGTATTGAG
TCTGTATAGA CCCCAGGA AAAGGAGGAA TTCGCCGTGC CCGAGAATAG CTCGTCCTAG CAGTTTANGG NAGAAATCTC
TAAACGTTTT AAATCACATA CTGACCAACT TGTGTTGATA TTTGCTGGAA AAATTTTGAA AGNTCAAGAT AC

SEQ ID NO:1364: (Length of Sequence = 345 Nucleotides)

CTGACAGATT TACAGATGCT GACCTATTGA AAAATACCAC AGCCAGAAATG GGCTAAACAG GTATATAGTT AATACAACCA
CCACCATCCT TTACTTTTAA CATAGCTCTT AGTAGGAATT TCATAAAANT GGACATCACA GCTAAAATGC ATTATTAATT
CTCCTATCTG CTGACAATAA AAAAGCAGCA AACTCAATGA TTCTATTTA AATGCACTAG ATGGGAATAT CATGTTCTAG
GGGTGTTTGC CTTCAAACCA AACCCACAGC AACACACACA AGCAATTTG GTATCCACCA TTTTAAATTC ACAATCTGAG
NCTAAATGAA TGGCTATTTA TATTT

SEQ ID NO:1365: (Length of Sequence = 255 Nucleotides)

CTCCAGAAAG CCATTGATCT GGTGACGAAA GCCACAGAGG AGGACAAAGC CAAGANCTAC GAGGAGGCGC TCGGGCTGTA
CCAGCATGCG GTGGAGTACT TCCTCCACGC TATCAAGTAT GAGGCCCA GCGACAAGGC CAAGGAGAGC ATTGAGCCA
AGTGCGTGCA GTACCTAGAC CGGGCCGAGA AGCTGAAGGA TTATTTACGA AGCAAAGAGA AACACGGCAA GAAGCCAGTC
AAAGAGACC AGAGT

SEQ ID NO:1366: (Length of Sequence = 322 Nucleotides)

AAAAAAAAA TTCAAAGAA ACAGAGTAAT TTCTCTCTT GCCTCAGCCC TAAGTCATCT CCCAGACAAA AAAGCAATCA
TCATTGTCAA ATTTAAAGG GAAAAGGAAA GACTTTTATT TGANTGAAA GATTTTTTTC AGTGTGATAG AGAGGGAAGA
CTGAAATAAA CAGAATTTAC AACCTGCGA CCTTTGACCC TTCTCTTCT AGCAGTATGG CAAACTAAAT AACTTGCACT
GAAAACGGT TAAAAGCTG TATACTTTTT TAAAAAATAT ATTINGNTA TGTATTGAT CTGCACAGTT TTGAATACAA
AA

SEQ ID NO:1367: (Length of Sequence = 349 Nucleotides)

GAAAACAAGG TCAACATCAC TCATCATTAG AGAAATGCAA ATCAAAACCA TAGTGAAATA CCATCTCACA CCAGTCAGAA
TGGCTGCTAC TAGAAATAAC ATGCTGGTGA GGCTGCAGAG AGAAAGGAAT GTTTATACAC TGTTAATGGG AGTNTAATTA
GTCAACCAT TGTGTTAGAC AGTGTGAAAA TTCTCAAAG ACCTAGAGAC AGAAATACCA TTTGACTGAG CAATCTCATT
ACTGGGTATA TAGCCAAAGG AATATAAATT GTTCTACTGT AGAGAAAACA TGCATGCATG TTTGTTTGCA GCACTATTTT
ACAAGAGCAA ACACATGGGA TCAACTTAA

SEQ ID NO:1368: (Length of Sequence = 379 Nucleotides)

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TTCAGAGGC CTGGCTCAA GTATATGCTC AGAATCACAG AGCTGGAAGA TAAACTTGGG TCTCTCTAGT GCCAGAGNCC
ATGNCCTCTG ATCTCTCAAG GGCAGAGGTA TTACC

SEQ ID NO:1356: (Length of Sequence = 406 Nucleotides)

TTTTTTTAG TTATTTCACT CTCTCTGTTA AATTTATCTG ATAGGATTCT GCAGAGAACA AAATTCAACA GGGCCCTGTG
GAGCAAGGAG CCCCCTTTCC CTATCTCCTT CCTCTAAGAG CTACACCCAG ACCAGCTGGT TATCAGOGGA GGCCCCGCTG
CTCCTCATGA GAACGCTGGT GGAAGACGAA GGTGATGGCA GTGGAGGCAG CATCCAGGC AGCCTGGAGT ACCTCATCCC
GGAGCCCCCA CTTATCAGTG CAGTGGTTCC ACCCTGCCAG GGTCTNAAGT GCAGTCAGAA CCATCAGGGG GTNGCCGGAT
CTGACGGCTG TTNACACAAC GTCGGCAGTG CAAACCTAGG GACAGAAGGC ACANCTNAAG TCACTNCAGA TCCCATCTTC
CTACTG

SEQ ID NO:1357: (Length of Sequence = 231 Nucleotides)

TTTCACAAAG AATTTATGAT TGCTTCACCA GGTCACTAGT GAGCTAAAGT CAAGGAATGA CTACAATCTT GTAGCATTTT
AAAGTGATTA GAATTTGAGA AACTTTTACT ACATTATGTG TTACTATCAT AAGAACACTC CTTTGGGGGC ATTTGAATAA
TAAAAAGENC TACATTCTTT GCACCANGTG NTCATTTTCA CCCACATTCC AGTATTTTNC TCTAAGTTGG G

SEQ ID NO:1358: (Length of Sequence = 302 Nucleotides)

CACAACATAAT TTGTAAGCCC CTGAGCGCA GGAACGGT TTTTAAAGAA TGATGTATTC TTCACAGTGC TTTCCCTTTC
TGTTACCCAG GGAGCACATG GCAATATAAG GGCTCCTGGG ATTGANCTT AAGTACAGAG AAAACCTAAG AATNCTTTTA
GATAGACAGA TAAGAGACCA CNAGAGAAGA GCAGATTCTA AGGTATNTGT GAGAAACGTT ATGTAATGAA AAGATAATTG
ATGACACACA CTTCAGAGN GTGCTGGCGA GATTTGATTG AAAAGCACAC GGCTAGGGCA CT

SEQ ID NO:1359: (Length of Sequence = 356 Nucleotides)

TAATGATGAG CCTCTGGGTG CAGGGAGAGG ATAGGACTTG ATGCTTTCCA GGGGAATAT TTAATAATTC AGTACTAAGT
TAAGTCTGTA TCATTTTACT TTTTATATAG TTTCTTATTT TATGTTGTAT GAGATGAAA GCTTGCACAT AAAAGATGAT
AAGAAATTAG AATTCATCGT TTCTGTGTA CCAAGAAGAA CCTAGTGAT CTCTAAAAGA ATTGTTGTTA AAATATGGAT
TCNCTTTCC TTCTAGTACT CCCCTAGCAT GACANTGAGC GTGTGATCCA TTACCAAGTC TCCTCATGAA AACCACAGTG
AGTCAGCCCT TCACAGAACT ACTACGGGAG GAAATT

SEQ ID NO:1360: (Length of Sequence = 366 Nucleotides)

AAAATTTAAT TCAACTGACC CATCCACCG GGAATGCCA CTAGGAAGGT GTAGCCTGCA GTTTTACCTA ATAAGCACAA
CTGGAGGGGA ATAGAAACAC AGAATTGTGA GGAATCGCA AGGCATGCTG CTCAGAGCAT GCCTAGCCCT GCACTGAAAG
CTATGAGATA CTGGTTCTGA GGCATGGCTG TGCTTGCTGG TGGGAGCGGG CATCCTCCCT TGGCCTCCCT GGGACACCTC
CTGTGCTCCC TGCACGTCAC TCCACGTGCC TGGGGTGCT ACACAACING CTGCAGCTTC ACTAAAGAAC AGGTGGCACT
NCAGCTTCTC CGGTCCTGC TGAGCACAGG GNCCCGCCAN CCTTGA

SEQ ID NO:1361: (Length of Sequence = 347 Nucleotides)

CCTCTACTG TCTGTCTGT GGGACAGTTG CTTCCCCCTC ATCTCCAGTG ACTCAGCCTA CACAAGGGAG GACCAACAGG
NTCTAGTTTT TOCAGTGAT GGAGTTCAA GCTTTTTTTT TTGTTTGTG TTGTTTCGCA AAATAAAAAC AATACACATT
CCAAGAGAAA TGAATGCATC TMTGACAGG TCTCTATTTC TCATTTACAT ATGTACACAC GNCCCTTGAG TCGCTGCTGT
TGACACGGCC CNGTGTGGAC GGGTCAGGCC CGAGGCCCTT CCGGAGCAGA CCTGTAGCTC TCTGGGGGAT CAGGGCTTCC
ATTAGGGAGA AAGTATTAGC AGTTTCT

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CTGTCAATAC AGTTCACAGG GAAAAAGCAA ATGIGGTATT TTTTGTATT TTTTAAAGC TCCCTGGGTC CCAGGTGTTT
TGCAGTTTTC AAGNCTTAT CTGCTAAAGG AATGCCCTTT TAGGGTCACA GCAGGT

SEQ ID NO:1350: (Length of Sequence = 317 Nucleotides)

CTGTGCCCA GGCTAGAATG CAATGNCGTG ATCTTGGCTC TCACTGCAAC CTCCACCTCC CAGGTTCAAG TGATTCTCCT
GCCICANTCT CCTAGTAGC TGGGATTACA GGTGTTCCACC ACCACGCCAG GCTAATTTT GTATTTTATAG TAGAGAAGGG
GTTTCACCAT GTTGCCCAAC CTGAACTCC CAACCTCAGG TGATCCACCT GCTCAGCCT CCCAAAGTGC TGGGATTACA
GGCATGAGCC ACTGTGCCTG GGCCAATAAA CTATATTTTN TCAAGCCAAA GTAGGACAAG CACAGTTTTT AAAAGGG

SEQ ID NO:1351: (Length of Sequence = 349 Nucleotides)

CGGATGGGTG GGATGAGACT TCAGCTTTAT TGGAAATGTT TTATTTCCCT ATCTAAAAA ATACTAGAAA GAAATACAAC
AAAAATGTTAA CAGTTGTTAA TGTGGGCTC TGTAAATATA GATATTGIGT TACTTTAGTC TTTTTTTTAA TCTCAACTAA
ATTAAAAAG GAATTTTATG CTTTTTTTAT CTCAACTAAA TTAAAAAGG AATTTTAAAA CCTAGTGT ACATGCAAGT
GAGTCCAATA ATGGCAAAAT AATAATGAGG NTACATAGGA AGGGTGACCT AAATTTTAAT GGGTGAATAC TGGGTCCCG
GTACAAGTTT GANAATTTT GAATTTCCG

SEQ ID NO:1352: (Length of Sequence = 304 Nucleotides)

TTTTTACT ATTTAAAAGA ATCCTAAAT GATGGGTATT CTCTAAAGCA TGCGGGGCTT AAAACCTAGA TGATGGATG
ATAGGTGCAG CAAACCACCG TGGCACATAT ATACCTATGT AACAAACCTG CACATTCAGC ACATGTATCC CAAGACTTAA
AGTAAAAGTA AAAATTAAAA AAGATGGGTG TTCTATATTT ATCTTTCATG TTACATTTTT CTTGTGGGG TTTCTAAATA
AAACTGTAA CATGAATGTT TTATTCAT TCTGTATTT AAAAGAAGC TGAGTAACAA AAGG

SEQ ID NO:1353: (Length of Sequence = 307 Nucleotides)

CTTAGTCTGA CATTAGGTTA TGAGAAGTAC AAAAGATCCA CAAGTACAAA AAAATCTGTA TAGCTTTGCG GTAGTTGAAA
AAAATGCAAG AGAACAAAA AATTTTTGA GTAATATCA TCCTGCAGA TCTGAGTAC AGTCCGCTG AAACACCGCT
GTAAAAGTGG TAAAAAATGA TTTCATTGIG ATTATGTTAA AATTTTTGAT GTCTCTNTA CTTGTTTTAG GGAATCTGG
TCTTCTENC ATTATACCT GGATANGINC CTTCCCTGT AATTTTTNCT GAAAGGCTCC AATTTCC

SEQ ID NO:1354: (Length of Sequence = 407 Nucleotides)

GTGAAGTTAA GCAGCAAGG CTGAGAACCG CTGCTCCAGA GAGGCCAGGA GGTCTGGTCA GAGGCTGGG CCCCAGCCCC
CAGGCACCTC TCTGTCTAG TTCCCTGGA GAAGTCATGA GTTGAAGAG TAGGCAGAG CCAGGTGTC TCACTGATC
ACTCATCAAT GGCCAATGAG AGTNCAAAG GTAGCTCTGA GCACAGGATG TTAGCAAGA CTCTGGGT CAGCTCCCAG
TCCCACCANT GCCAAGTGG GGATCCTTAG CAAGGTACTT ACCTTTTNN TGCTCTGTT TCTACGGCTG CAAATGGGC
ACAATAATGT CAGATTCATG AGGGATAATG AGGACTAAAA TTAGNTAAT TNCCTATAAG CTGCTTCTAA ACGTATTTAC
TTATAAA

SEQ ID NO:1355: (Length of Sequence = 355 Nucleotides)

ATTACTATTT GCCTCTATAG GAGGTTTCAT TAGGCATCTN CTTCAATTATG AGTGCAATAT AATCAAACAC TTATCAGTAC
AAGGCAGAGA GACCGGACT AGCTGCCTAC ACATCCTCAA TGAGCTTTAG GAAATGTGAA GGAAACATGG ACTGAAAATC
TTCTGGTGGC AGGTACTCTC ATGTGTGTC CTATCTGATG CTCTCAACAA CCTCTAGGG TAGATATTGT GACCTCATC

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GAACCCAGGA GGCGGAGGTT GTAGTGAGCC AAGATCGTGC CATTGCACTC CAGCCTCGGC AACAAGAGCG AAACCTCCATC
TTAAGAAAAA AAGAAGGGTG TGATAGTTAA ATTTATGCAT CAACTTGGCT AGGCAATGGT GTCCAGATAG TTGGTCAAAC
ATTATCTTAG ATGTTTCTGT GGAGGTTAAT TTTTAGATGA GATTAGCCTT GTAAACTGGT GAAAATTGGG TGAAGGAGAT
TACCTGCAAT AGTGTGGTGG GTCTCATTTA ATCAGCTGGA GGCTCAATA GGGAAAAAGA CTCACCCCTNC CCTGGAGCAA
GAAGGAAATT CTGCCCCAGC AGAACTTCTT NGGCAGCAG AATGCAACCA TAAACTCTT

SEQ ID NO:1344: (Length of Sequence = 400 Nucleotides)

GACGGATGGG ATCGGGGCTG TGCTCTGCAG GTCTCCCCA GAGATGTTGT CATACTGCGA GGGATGCCGC TCGTAGGACA
CCCTGCAGCC AGAGCCGTCG GCGTCTGGEN AGGCTGCGCT CCTGCGCTTC TTCTGGGGA GAGCAGGTGG CGTATCTNIN
TGCTGCCCTG GGGCCAGAGG TCCGINTGSC TGGGGATGGC CGCCAAGAGG CAGCTGGAAA GGAGGGCCAA GAAATGGAGA
CCCAGACTCC CCCAAGACT CTGGCAACGG GCTAAGGTTT CAGGGCCGTC TGCTGAGGTA TCTGGTCTGC GTTAGAGAGG
TCTTNTGGA GGAATTCATA GTCGGGATCA TAGCAGATCT TGTCCTTTT CTATACCATC TGTCCTATTT GGAGATNGCT

SEQ ID NO:1345: (Length of Sequence = 347 Nucleotides)

CCTCTCCCC CAAGGAGCTT GCAATTTTAG GAACTAATCC AGTTTGAGGG CTGAATTTAA GTTAAATCA ATTACTGCCC
TATGTACTCC TTTTAAACA ACATTAGGTC AAGACCCTTT CAGTGCTAAA TAACTGATT TGTCATTATC ATACATTCAA
GTTTTATAAA TGTGTTTTTC CTCACCTCAC TGAATATCA GAATCCAGCT CAAAAACAGA ATCAAAGAGG AGACTTTTAA
GCATTATCAA TAAAACTAT GGTACGGTAA TATTCAAAT AGTGAAATC ATTATATTAT CTAAATCTCT CAGGAACTG
CTTTAACCAT GGATTAAATA ATTTACC

SEQ ID NO:1346: (Length of Sequence = 287 Nucleotides)

CAAGTCAATA CCCATAATTA AGTCAAGTTC CCAGCCTTAA TTATATTNT NTCTCGCTCG TTCACTCTCT CTCTCCCTCC
CTCTTCCCT CTCTGCCCCA CCCCCTGTA CATTATATAC CAATTCATTG GAGATATATA TAGTNTGIN TNGTNGTNG
TGTGTGTTNC TGTGTGTGTG TGTGTGTAA AGAAGCAGGA TGCTTACAC AGATGTTTCA TATATTGAGG NATTACAGAG
TAATTACAGG GAAAGGTATT ACACGTCTCT TCAACACCT AGGCAGT

SEQ ID NO:1347: (Length of Sequence = 295 Nucleotides)

ATTAAACAAC TTTTAAAC TTTTGTGCA CAGGACAGAA AACTGCCTGT ACATGCTATG TCCACTTTTG GAACACAGAT
TTTTAAACAT TATGAATGCA CAAATCTTA CATATCATGC AACTCTATGC CAAGAACCA ACTTCTTCC ATGCAACAGA
TATGAAGATC TAAATGGAAA CCTAGCTAAG TCTTAAACAC TTTCCAGTA GCAAGTATAA TATATGTTGT TGAGGGAAAA
CCAGTCTTAA CAATTNCTTG TACACAATAT TCAATGTGCCA AATACAATGN CAGGN

SEQ ID NO:1348: (Length of Sequence = 332 Nucleotides)

AGTCCCTGCT ATGTGGATAT TTGGTAGCAA TGACTGATGT GGAACTACA TATGCAGATT TTATGCTTC AGGAAGAACA
GGTAGAAGAA ATGCAATACA TGATATCTTG GTTCTCTCTG CAAGTGGCAA CAGCAATGAA TTAGCCTTGA AATTAGCAGG
TCTTGATATC AACAGACAG AAGGTGAAGA AGATGCACAA CGAANTTCTA CAGAACAAAG TGGNGGAAGC CCAGGGAGAA
GCAGCAAAAT CTGAAAGCTT AACACCCAC TTTGACCTC GGCCACACCT GAAAATGTCT CAAATCTCCA GGGNGTATCT
GGGAATGCAT TT

SEQ ID NO:1349: (Length of Sequence = 296 Nucleotides)

CCCCAAAAA CAATGACACA AAATTCATTT GGTTAATTCA TGTAAGGAA AAAACAGCAA CACCACCACA CAAACAGGAA
AGTGGGAGTA TGATTAGGAG GGGTGAGATG AAACTATTT TACAGTAACA TTTCCACCA AAGACTGTCC TAAGAACAG

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TTTGATAATA AACATAAGCC AAATCCAAAA AAATGTTCTG GGTITTTCCA TCATTTCAC TCATTAGINC CAGGAAAA

SEQ ID NO:1337: (Length of Sequence = 272 Nucleotides)

CTTTCCCTCAG TATCAGAGT ACCGTGTTTIN CTGGAATTTA TTAAATGT CACCTGTAG TGTCCCTCT CTAGGGCTGT
TTGTTTCATT TCCCTCTGAA TGAATGCTGC CACACGGTCA TATGTGAGCC AAGTTTACAA GAATGGAGTT GCTGCTGAAG
AGATCTCTCA TTCATCTCCC CCAGTGCCTG TCCTTCACAA TCATAACGTT ACCCTTGCTT GACAAATATA CTGTATGGCA
AGTCATAAAG GTCTINGAAC AGGACTTGAC CC

SEQ ID NO:1338: (Length of Sequence = 212 Nucleotides)

TAGTCCCCCTT TATATAATAT AATCAAGTTC CTCCATCTGG GCATTTCAGT AAATTCTACA ACATTGCCAA AATCTGATT
GACTCTACAG AATATGATA GTTTATTAA CCAGATAGTA ATTTAAATTT TTACAACATG CGTATTTCAT GTAATATTA
TAACAGTAAT TTAAATTAAT ATTCAATACA TACCGTTGA ATTTTATAA GG

SEQ ID NO:1339: (Length of Sequence = 280 Nucleotides)

TTTTTAGGAA TAACAAATGT TTATTAGAA ATGGATAAGT AATACATAAT CACTCTTCAT CTCTTAATGC CCGTCCCTCT
CCTTCTGCAC AGGAGACACA GATGGGTAAC ATAGAGGCAT GGGAGTGGA GGAGGACACA GGAAGTACCC ACCACCTTCT
CCTCCCGGTC TCCCAAGATG ACTGCTTATA GAGTGGNGGA GGCAACAGG TCCCTCAAT GTACCAAGTG GTCACCTATA
GCACAGCTC CAGATGCCA CGTGGCTGCA GCTGTACTCA

SEQ ID NO:1340: (Length of Sequence = 324 Nucleotides)

CTGTCCACC TCAGATCATC AGGCATTAGA TTCTCATAAG GAGTGTGCAA CCTAGATCCC TCCCATGTGC TGTTCATAGC
AGGATTGCA CTCTATAAG AATCTAATGC CACTGCAGAT CTGGCAGGAG GCGAGCTGA TGGTGGGAAG GTGGTATTGC
TCGCTGCTC GCCTACTGCT CACCTCTGC TGTGGGGTCC AGTTCACCAC ACAGACCACT GGTCTNTGAC TCAGGGACCA
CTAC TCT AACANGNTG AGGAAACAA CTGGGTTCAT CACACAATTA TTTAAAGTT CAGGTTTINC AAATACTTA
TCC

SEQ ID NO:1341: (Length of Sequence = 376 Nucleotides)

CTAATCAAGG GTACAAGATG TCTAANTCAA AGGCCAGCT CTGCCTACAA GTCAAATATC TAGGCCTAAT CTGGGCCAGA
GGAACCAGGG CCGTCAGCAA GGAATGANIA CAGCCATATC TGGCTTATCC TCGCCCTAAG ACATTAAAC AGTTGTGGGG
GTTCTTGGA ATCACTGGCT TTGCGGACT ATGGNTCCCC AGATACAGCG AGATACACTC TAAGGAGACC CAGAGGGCAA
ATACTCATCT AGTAGAATGG AGACCCAGAG GGCAAACTACT CATCTAGTAG AATGGGGACC AGAGGCAGAA ACAGCCTTTC
AAAACCTTTA AAGCAGGCCC TTCTTNCAG CTCCAGCCTT TAAGCCTTNC CACAGG

SEQ ID NO:1342: (Length of Sequence = 335 Nucleotides)

ACCTTCCCC ACTCCCTGGT CCGCGGAGC AGCTCCTTCT GCGCGANTNA CTCACAGTGC AGGGAAGGA GGCAGGGAAA
AGACCAGGAT TCTGTAGTIT CTGAGGTTGC CACACACAAA GAAGCTGTGG TTCTCTGCC TCGGCCACTG ATGAGACTAA
AACTGGCTTC CCGTTGGAGA CGCAGATT T CAGGCTGATC CCTGCTTAAG CCGTCTCATC CCCACGCTGG TCCGGTATT
GATACAAGAC CCAGCTGGTG ACAAAGCCTC CAATCCTGGG GGTCCACGGA GCCTGGGGCT GANATTTCCA GGAACCTATCC
GCCAGTGGGC GCCCA

SEQ ID NO:1343: (Length of Sequence = 379 Nucleotides)

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CTAGCTGAGA CTATTC AAAA ACAAACTTTT TATCANATTG TNATCATAAT CAACTTTCTA CAGGCTAATG ACTTTATAGN
TTTACTINCTA GTGTATATCT ACTAGCACAA TTGGACCCAG TTCC

SEQ ID NO:1330: (Length of Sequence = 221 Nucleotides)

CAATATTTAA ACAAAATGCA AAACGTGAACG TTACCTCAAA ATGAAACAGT GTGTGTACTG GCTGTTAGAA GTTGATGGCG
GTCTACTGTT TGATATTAC TGCCATCTTC CTCTGCCCCA CTCTACCTCA ACTCGGGACC GCCTCACCTA ATGGTGGGCT
TTGCCGCTTT ATGCCNIGTA GAGNAGACAC TGGGTAAACCA CAGCAAATCA ACACGGGNTC C

SEQ ID NO:1331: (Length of Sequence = 279 Nucleotides)

AATAGAGATA ATGGTCAACT CTTGAGAAGA ACCAAATGCT GGTGCCATCT TGGAAAGTCT ACATCACCTC CTCCTCTTAC
TTCCTTGAAC AGCAATATTT CTGGATTCT TCTGCAAGCC CCAGGCACTG CAGGATGCGT TTNTTTTCAG CAGCCAGTTC
CTTCTCAGAG AACTGGCCCC AGAGTTCTG GACAAATATA TTTTGATCIT TCAGAAATAT GTTCINATTC ACTCCTACAT
TTGGCACATT NITCAAGGGC CCAGACTTGA AATTGGAGG

SEQ ID NO:1332: (Length of Sequence = 290 Nucleotides)

GGACGAGGAG ATGTCTTTGG TGGACTTGGG AAAGAGGTTG CTAGAAGCAG CAAGAAAAGG CCAAGATGAT GAAGTGAGAA
CGTTGATGGC AAATGGGCGC CCATTCACCA CAGACTGGCT TGGAAACATCA CCCCTCCACC TTGCAGCTCA ATATGGTCAT
TATTCACAG CAGAAGTACT CCTTCGAGCA GGTGTAGCA GGGATGCCCG GACTAAAGTA GACAGGACCC CCTTGCACAT
GGCTGCAGCC GATGGACATG CGCACATCGT GGGAACTGCT TTTTCGGAAT

SEQ ID NO:1333: (Length of Sequence = 201 Nucleotides)

CGCCCAGCTA ATTTTGTAT TTINAGTAGA GACGGGGTTT CATCATTTNA GTCAGGCTGG TCTCAGACTG CTGACCTCAT
GATCCACAG CCTTGGCCTC CCAAAGTACT GGGATTACAG GCATGAACCA CCACGCCCAT CTGATTTCCC GTTTTCTGCA
GGGTAAAGNC TCAGGGCCGG CCCATTGNTT TCAGGANITT T

SEQ ID NO:1334: (Length of Sequence = 267 Nucleotides)

NNATACTTT TIGTTGAAAT TTAGAAAATG TGGATCTTTT ATACTTGCTT TCCCTTTTCT TCTGCCATCT TTATCTTCTG
CTGAAGGAGA CAAACAATAT TTAGGTGAC ATCTATCACT TTATGTAGGA CCTGCAAACA CTCATGTTGT CTTGGGACAG
ACAAATGGAG AATGTAAATC TGTTACACTG TGACAGGATA TAAITNTGGA TTGCATAGGN TTNCAACAAA GTGCTGTGT
GATGANTAAA TGGTAAAATA TATTTAT

SEQ ID NO:1335: (Length of Sequence = 279 Nucleotides)

GGNTCTTGTT AGAATGCAGA TTCTAATTAA AAATGTGTAG GACAGGGCCT GAGACTCGGT ATTTCTAACA AGTTCCCAAG
TGATACTAAT GCTACTGCTT CACAGATCAC ACTTTAAATA GTAAGGTTCT TGAGAGAGAT TAGTCTCAAG AGAAAAGAGA
CAAAAATCTC CAGAGCAGGA AGACCAAGAA AAAAAATGG AAAGTAGCCA GTCGATTATC AACTAGATGG CCTTAGTGAG
ATTCTGCACA ATATTTTCATC ATACAAAAT GNTTCCCA

SEQ ID NO:1336: (Length of Sequence = 398 Nucleotides)

TTTTTTAAGC ACTCTTGTTT GGACTGGTCA AAGATGTTCC TAAAACAACA TTGCTGTCAC CAAGCCTCCC ATGANITAGG
CTGGCTCCTC CCATGTGGAT ATCTGCTTCT GCATAGTTGG TGAAGAGGAA GCATCCTCAG TCAAAGCTAC CAGCTGAGGA
ACCCTTAGGA AACCCCGCTG GTACCTGGCC TGINTTTTGT AAGTATACAT CAGGCCAGGG GGCTGCTTGC CAAGCAACAT
CATTGACTGC ATACTGTTTA GTGCATGCAT TACCAGGGCT CAAACATCCA AGTGATGCTA CCTGAATAAG TCGAGGAATT

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CGACCTCAGT GTAAATCACA AAACGGGAAG AGCTGATATT GGCAAAATAA TTACATGGCT CATTTCCTTG CATGTCAAAA
TAGGATTGA TTGGTTGTAA AAGATGACAA ATACCTTTNC GGTTCATG TTCTTAAGTG GGAAGTCACT TATTACAGAC
CTNATTGGGA GTAAACAAAG CTGTTAGACC TTTCATTATC AGTCCNNTTA ATCCCTTCAA TAATCCCCCT AAATCAGTGA
GGCG

SEQ ID NO:1324: (Length of Sequence = 279 Nucleotides)

GATCCATGCC ACAGTGACCT CTGTNACCCT GCACAGCACA GAGGGGAAAG CCCTGTACCA GGTGGCGTAT GAGAATGAGG
TAGGCAACAG CTCGTACTTC TATGACATCG TGGTCATCGC CACCCOCTG CACCTGGACA ACAGCAGCAG CAACTTAACC
TTTGACGGCT TCCACCCGCC CATTGATGAC GTGCAGGGCT CTTCCAGCC CACCGTCGTC TCCTTGGTCC ACGNTACCT
CAANTCGTCC TAATTCGGTT TCCAGACCC TAAGCTTTT

SEQ ID NO:1325: (Length of Sequence = 338 Nucleotides)

TCAGTTATTT GTGTGTGTGT GTGTGTGTGT GTGTGTGNCAT CTGCAAACCC TGCATTTCAT TATCCAAAAA TTATTTGATA
TTTTATAATC AGAGAAAATG CTATTTTFAA ACCCTACCAC TGCTGACCAA ACAACAATCA CAACAGCATA AACTAAATA
CTGTTCAACA AATCTATTTT AGTGTAGTAA TTAAATAATT CCTAAAATTA TAGACATCCC TAATATTCTT TCCNTTAGTG
GTTCCTCAGA GTGCAATCTG TGGAGCAACT ACCTTGAAGA AATTTGGGGG AATGAGACCN TGGGAACCCT AAATGTTTAG
NATGTGCTC TNGGGGAC

SEQ ID NO:1326: (Length of Sequence = 393 Nucleotides)

AACTTTGGAG GGGACACCAT CACTCAAACC ATAGCTGTAA ATCTATTCCT TGAGTCCAGA TCACAAATTA CCAATGAAC
ACGTTCTCCA TTTTGTAGTAC TTTTGTACCT GTAACCTCT GTCTACCTAA GATGAATATT TATTCATTGA ATGAATCATT
TAATTTTGGT GCCCCAAAT TCTCAGTGA ACAATTCTG GATACCTCTC CATCACTAAG ATAATCACTA TAGCAGTGTG
ATATTCTTCA ACTTAGNACA AATCTAAAGG CTCCATTAT CCCTACTAGA AGTGTCTGT TGTCTTTTTC ACTCTCAAAA
TATCTCCAT GCGCNAACCA AACACTAANG GGNACCACCA TATCTTGCTC AATGGAGGCN AAATCACTTT TTA

SEQ ID NO:1327: (Length of Sequence = 381 Nucleotides)

CTTTGGAGAA TTAATTCAGC AGTTGGTAAA ATCATTCAT AATAATGGT ACCATTCTGC TCTGTCCAC ATTTTATGA
AGTCTCTTTA AATTTAAAAA GGCAATGTGC TTTGTGGTTC TTGAGCAACT TAAATACGTT GCTCTGAATA GTTATTGTGA
TGAGGTAAAT TGTAACAACT TTAGGATCA ATGCTAATTT NCTTAAATGT TTCTGTAGTT TCCCTTTTAT TATAAAGTAT
ATTAGGCTGG ACTCTTGGCT GTAAGTGGCA GAAAACCTCAA CTCAGATTAG TTAAGAAACA AAAGGGTGT GGTGACAGTG
GTGGCTTTCA GACTATTGCT GCAGGCCAC CTGCCATCCT CTTACACCCT CAACATACCC T

SEQ ID NO:1328: (Length of Sequence = 289 Nucleotides)

AGAAGAAAAT TCTTAAGCAG AGTACTTAAG TACAAAATG AGTGAATGAA AGATGCTTAA TCTAGGGAAA TTAAATGAGA
AAAATACATG GTGTGTGINT TGGAGGGGGA GCTGGAATTG GAATGGGCTG GAGTGATGAA AAAAGCCAA CAGATATAGT
CTTCTGTTTT GTAATATAGG CTCAATACTA AATTATGTAG GACTAGATAA TCTAGTCTCT AATGTCTCCT TTTTGCTGGC
AACCTGGGGG CCAATTACAC TAGAGGGTGT GTAGAAAAA GAGGAATAT

SEQ ID NO:1329: (Length of Sequence = 364 Nucleotides)

TTGTATATTT GGGATTGTCA ATAATCTAGG CCACGTGGAA GATAACAGGC TATTTTGGAT ATTINCTAAT TGCAATGGTT
ATATTTCTGT GTAAATGCCT ATACAAATGT TTGCTTGGTG ACATATGGAA AACTTAAGGN CTTTATGAA AAGCGACAA
TGGGGACCTC CAAAGCGCCA AAGTTTCTGC TAGGCATAGT GTTATTTTGA GATTACATTA AAATGGCTAT TTAGACCCAT

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SEQ ID NO:1317: (Length of Sequence = 316 Nucleotides)

GAATTCOGAT TATAAGCATC AATATGCATA AAATGCTTAG AGATGGACCT GATATATAGC AAACACTCAG TAAATGTITAA
 CTATTATTAT NACAGCACAG CAATTTATTT AAGATTACTG AGTGTTCAAA TGAAAAAAAA GACATATTAA CTTATATAGT
 GCCATTTCTG ACATAAGAAA TACACAAATA GAGGTAGTTT CTGAAACAAA GATCAAAAAA ATCTATTGTA TGGTGTCTTG
 TATCAATGTG GCTAAATTT TCGAGCTAAG TTTTATNAAA GACAGATCAT ATTTTCANGTA GGTGATTTTT GTATTG

SEQ ID NO:1318: (Length of Sequence = 300 Nucleotides)

GTGGGACTAC AGGTGCACGC TATCATACCC AACTAATTTT TGTATTTTIA GTAGACATGT GTTTCCTCAT CTGGGCAGGG
 CTGCTCTGAA ACTCTGACC TGAGGTGATC CACCTGCCTT GGCTCGCAA AGTCTGGA TTACAGGTGT GAGCCAACAA
 GCCTGGCCCA TTTATTTACT TTTAATTTT CATTTTCTT CATCATGTAG AATGGACAAT TTCAGGAAAC TGATAGAAAA
 TACTGTCTAA CATCAATTT TCAAAAAAGT TTCTCTGTAA CAGATAAGGC AGTCAATTTT

SEQ ID NO:1319: (Length of Sequence = 306 Nucleotides)

CAATAAGCTT TAAAAAGTTA GTGCCACATG ACCAGCATCG ACTGGCCTCA GACATCTGCA AGCACTCACC CAGGCCACAG
 GGTGAGGTAG AGGGCTCCTG GGCCCACTGT AGCCCTGCTT GGGTCAGTGT AGCTGGAAGG CTACGGGNCC TTAGTGGGGA
 GCCACAGCCT TTCCCACTAG GGGGCTCTC ACTCTGACAT CTCCCTGTGG TGTTCGGACC AAGGGTGGGG AGGGAGACAC
 GCTGGCCCTA AAGGGAGGTG GTAAATNAGT AAGATCTCCA GGGCCAGNCC ACAGGGCTCC GTCCAT

SEQ ID NO:1320: (Length of Sequence = 373 Nucleotides)

GGTCTTGATC TCCTGACCTC GTGATCCACC CGCCTGGGCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGTGCCTG
 GCGAGATAA TTATTTTINA GTGACGATTT AGCAACCTGA AAACCTTGGG TCTTTGGGAT ATGACCTCAG TATCAACACA
 GAATATTTGA ATGCTGGTTA ATATATTINT TTTAACTGT GATAGAATG AAATCTTGTA GCCACATTTT GAAAGTTTAT
 TCTTCATTAA CTAGTCTTTT CTCACCTGAT TTTCTACAAG AGAGAATTTT CCAAAGGTT AGTTGTGTTT ACATTAAGAA
 CTTGGGGTTT GNTTGACATG AAATGTTTCT ACACCAGCAG GTCTCAGATG AAT

SEQ ID NO:1321: (Length of Sequence = 366 Nucleotides)

GTITGGCTAA TCATCTATG ATTTTCCTAT AGCTTGAAAA CTTTTATAT CTTAAATTTT TINATAATTT TGAAGTATTA
 TGTITGGGC TTGTATATC CAGTGTATTT TCAATTAAT TCCCTAAT AAAGTAATC AAAAGGAATA AAAGTGTAT
 GTGGGCTGGG CGTGGCGCT CATGCCGTGTA ATCCAGCAC TTTGGGAGG CCAGGCGGC AGATCACCTG AGGGCAGGAG
 TTGGAGACCA GCCTGGCCAA CATGGTGAAA CCTGTCTCT ACTAAAANTA CAAATTAGC CGGTGTGGT GGCACATGCC
 TATAATCCA GCTATTGGG AGGCTGAGTC AGGGAGAATC TCTGA

SEQ ID NO:1322: (Length of Sequence = 362 Nucleotides)

AGGGAGGGTA AAACAAATCC CCTTCAATG CTTGTAGAA GGGGATTAGA ATCACTGTGG AATTGGGTAT TGGCTAATAA
 AGTATAACG CTAAAGATCA ATGCCTGAGT GCACAGTGT CTTCAAGCC ATTGTACTTC TGCTTTCCAA GANTAGANGA
 CTACTTTTAA ACCAAGANTT AAAAATAANC TCATAATTTA AACACCTCTT TCATGCCAAA TGGAATCTT AGTGTGAAT
 AATCAGGCTC ACCTGAATAC AAAGTTGTCC TGAAATGCT GACAATCACA AAAAAGGTT TAGAAGCTTT TTCAAAAAAC
 AAGTTCAGAT GGTTCCTACT GAGTTACTAT TTGAGGTAA AG

SEQ ID NO:1323: (Length of Sequence = 244 Nucleotides)

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SEQ ID NO:1311: (Length of Sequence = 331 Nucleotides)

AGCTCAGATT CATGTCCTGA GCCAAACAAG TGAATGTATC TNAGAAGACT CAGTACCACA TGGTACTGGG AGATCTTACT
 CACTTCAGCT GCGGTTGCTC ATTAGTGAAT GTATGACAGC AGGATGTGAG GGGATGCCCA GGAGTCAGTG TTAGCATTGT
 CATCTGAGAT CACTGCTATT AATATCATCC ATTAATTTAT TAGTGAGCTT CACTATATGC AGACTGGGAG ATAAGGAGAA
 AATCTGTCAC ATTCTCTCTA GCTAATCAGA TCAGCTACCA ATTAATGAGA TTCTGAATGA AATATCAATA TGIGTTTTTC
 TAATTTGGAC C

SEQ ID NO:1312: (Length of Sequence = 347 Nucleotides)

TTTTTTCCTT TATAAATTAC CCAGCTTCAG ATTTTITINAT AGCAATGCAA AAATGGCCTA ATACACTTCA GAACCTGGAA
 GATTAGCAGT GAGAAATAAA ATCAGTTAAG TTGATGACTT CTAGTATTTT ACTACATGGT TGTTTTGCCA AAATGAAGGC
 AATATCAGTG TCTTCACACT TAAAAAGTAG TATATTGANC TTTGAGGTGA AAGAGCTGGG GTTTAAATTT GTNCTTTACC
 AATTATTGAG ATAAGTGTC TTGAGCAAGT TACTTGCTTT CNCIGATCIT TAGTTTTCTT ATTGTGAAA TTGGAATGG
 TGGTGTTC A GAGGGGGTT GTATATA

SEQ ID NO:1313: (Length of Sequence = 336 Nucleotides)

GAATTCCTCT ATCAAAGTGT TCATAAAACC TGGAGCTGCA GCTGGCCCC ATTAGGTAGT TTCTTGGTGA ACGTTTTCCA
 AGGAAACTT TTTTTTAACT ACTTCATAAA GCCAAGCACA AAAGGACATT GCAATGACTG GCTGAAAGAC ATGGGACTTT
 TTGCTCTCGA CGACTAAAC GTTAAATGGG GGCTTACTTT GTGCATTTAT GGAAGAAAAC TTGGAAGGCA TTAAAGGCTA
 CATTTTGAGC CTGTCATGAT TTCATTCAAT TATGCATGAA TTCATTGTT CAACATTTAT TTAGTACCCA CTATATGCCA
 GGCACGTGC CAAATG

SEQ ID NO:1314: (Length of Sequence = 391 Nucleotides)

CCGGTTTAGA CCTCAGTCGG CGCTGTGAGG GCACGTCCG CCCACCTGCT CGGCTGGCTG AGCTAGGTCA GTGGAGAGAA
 GCTGGGGCCA CTCACACAGC ACAGCAGGCC ACAGTCTACA GAGTAAGCCA GGTAGAGCGG TTAGAGTGCC AGCCGCTGGA
 GAAAGGGTTA TAGAAACACA TCCCTGACTC TTTGGTTATG TCCCACTGCC TCCTGTCTC CTTCCTCTC CTTACTCTCC
 TTCTTTCTG CCTCTCTG TCCTTTGGAA GTCCCTGTTG TCAGTGCATT TNAGTGCATT GACGTGCTCT AAACACTGAT
 CTNCACACAC CTCTCTTAT CTCCACCTG ATAGGCAGGC CCCAGANCC CTTTTTCTCT AGCTTTGTT T

SEQ ID NO:1315: (Length of Sequence = 374 Nucleotides)

GAATTCCTG GAACACTGGT GTTACAGAG AGAGTACTT TGTGGAATGG AGCTTACATG ATGAATGAAA AAGAGACCGT
 TAAAAAGTAC TAGCCGTGT TTACAAATAA CTACCAGGTA AACAAAGAAA TCACTTTCTT TCCCTTTCT AAGGATAAGG
 GAGAATAAAA TAATCACCAG GAGGCATGGA GTTTGAAAAG TATATAACAG ATTTCTTTAT TATTATTTAC AATCAAGTTC
 TGTGNCNCA CATAATGAAA TAAATAAAG ATGTGCCCTG GCGTGTGAAT TTCAACTCTC CTTGACTTAA GTTCTCTGAA
 GGGCAAATTG GAAAGCGGTG ATCAGGCAGG GAAGAGAGGG CAGGTGGAGG CCAG

SEQ ID NO:1316: (Length of Sequence = 353 Nucleotides)

CTTGTTTACA GGTTTTGAAA GGTGTGTNAG ATTAGTATTT ACTTTTAATT TTTTGAGTAA TAGAATGCGT TTAGGTCTTA
 AATTACTATG GAAATGGCAT AGTGAGGATT CTNCACAGAT ATTAGAGACC TTCAACAACA TAGTGAAAAT AGATTGTGCC
 TTTCTTGTA ATAGCTGAAC TATGAAAATT TGANCTGTCA CTGGAGGGGG CATTTGCNCT GAAGTTTGCC AAAGTAAAAA
 TAACTTTNCT CTTTGTAGTAA AAAAAGCTAT ATTTTINCAAT ACTGCCCTGCC ACAGCAAACA AACAAAGTCT TGTTTGTGT
 TTAATATTGG CAAAGGAAAA ATTCTCTATA TAA

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SEQ ID NO:1304: (Length of Sequence = 211 Nucleotides)

TATTTTTCNC TTCTCTCTC CCTACATATA TTCTAAACCT TCTAAAGTTT TTINATTTT TTAAGGATCA CTTTATCATA
 AAATAAAATA TCCTTTTCAT ATAATAAATT ACCTAATAAA AAGTCTTTT TTTTCATATT AGCCGAGGIN CTTTGCTACA
 TTTATATGGT AATAAACGCC TTTATTAATA TAGANTATTA AATTATAAAG A

SEQ ID NO:1305: (Length of Sequence = 316 Nucleotides)

GAAATGATTC AGGGAAAAA ATTTATAGTA CGTTTCAAC TTTTITTTT TTTCTTTGAA ATGGAGTATG GTCATAAAAA
 GGACACTAAA TAACCTGATT AAGCTAGAGT ATAGACCAAA TTGCCACTTA CTTTGAATG TTTTACCAA AGGTATCACT
 TTGAATAAAG ATAACTTTCA TTAGACATCT ATCTTTATGT GTTCTGCCA TCATTTTCACT GAGATCAGAG GAAAGTTAAA
 TTAGGAACAA TGAAAAGCT TAAGAAATGA ACAATCATCA TGCITTTGTG TATGCTTAAA GTGAGTACAT GTAAAA

SEQ ID NO:1306: (Length of Sequence = 310 Nucleotides)

GGGGATTTT GAAGGCTTCG CTGTGGATGG CCGAGAACCT GCTCGGGGTG TAGGTCTGTG TGTCTGGGGG ACAGTTTCCA
 CATCTGAGCA CACGGACTGG ATTTCTGAAA TGTCAAAGTC TGATGCATCA CTGCCTCGGC GGCTGCTGGC CCNCTGCCA
 GCTTTGCTTC CAGCTCGACT TCCTGGTCGG CTGGGAGTCT TCTTGAATC AGCAAACGT GTTCGGACTC TGGCAGNIGC
 AGTTGTATC AAGCCACTGT CCTCCCANNA GTGGAAGCCT TTCCCTGATA AAAATCCTGG AAGTCGAAGC

SEQ ID NO:1307: (Length of Sequence = 302 Nucleotides)

TAATAAATAG TATATGTAGT GAAGAAAAAG TTATAACAAG TATACATTAC ATTAAACACA CCTAGCACAT AGGACACCCCT
 CAACAAACAG CTACAGCTGC TGTAATCAT GTGTATAATA TATAACATGC AAGCATATCT TCATGTATG ATTAATTAAT
 ACTTCTTGA AAAGGATCTG AGGAACATAT TTAATATAAT TNATATGCCT GTCATATGT NCATTTAGTG CTTATCAATT
 ATATTTAGTG CTTTCTAATT AGCTTCATCC ATTTGATTAA GATAGCAACT TGTATTATTT AA

SEQ ID NO:1308: (Length of Sequence = 285 Nucleotides)

CGCGGCCAA CGTGGTCTTC CTCTACATGC TCTGCAGGGA TGTATCTCC TCCGAGGTGG GCTCGGNTCA CGAGCTCCAG
 GCCGTCTGCG TGACATGCCT GTACCINTCC TACTCTTACA TGGGCAACGA GATCTCTTAC CGCTCAAGC CCTTCTGTGT
 GGAGAGCTGC AAGGAGGCCT TTINGGACCN TTGCCTCTCT GTCATCAACC TCATGAGCTC AAAGATGCTG CAGATAAATG
 CCGACCCACA CTACTTCACA CAGGTCTTCT CCGACCTGAA GAACG

SEQ ID NO:1309: (Length of Sequence = 319 Nucleotides)

TTTCCAATTA TTATTTTGCC AATATCCTCA ACTCTTTTGC CCACPTTINAT CTTCCATTCA ACCCTCCCTG CAAAATCCTG
 ATCTAAAAGC AACCCAAAGTA TTGCTCTT CAACCTOCCA GCTGCTGAGT GGTTTTGGGA ATTACACAAC CACTAAGCTT
 GGTGCAGATG CACTATGGCC TCAATAGAGT CCCCCAGTGC TGCCCACTTT CTCTTCCAT ATTTCTCCAC AGCAGCTGGT
 CAAAATACAT TINTCCCAA ATGTCTTACA CAACCCCTT CTCTCTTATC ATCCTTANCT CACCCCCACC CCAGTTCTT

SEQ ID NO:1310: (Length of Sequence = 356 Nucleotides)

TGAAGTTTGT CTCTGTGCGC CCAGTCIGGA GGGCAATGTG CGATTTCAGC TCACTGCAAC CTCTGCCTCC CGGGTTCCAG
 CGATTCTCCT GCTCAGTAT CCCAAGTAGC TGGGATAATA GGCACCTGCA ACCATGCCCA GCTAATTTT GTAGTTTTAG
 CAGAGACGGG GTTTCACCGT GTTGGTCAGG CTGGTCTTGA ATTCTGACC TCGTGATCTG CCGCCTCGG CCTCCCAAAA
 TGCTGGGATC ACAGGCATGA GCCACGCAC CTGGCCCTAT ATCCTGCTTC CTATCTCGTG GGTGATGGTG TATGGCTTTT
 ATTTATTTCA ACCTGCAGTT GTTGCAGAA CATCTG

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GACTTCTTAC AATGCAGCAG CAAGAGAAAA TNAGGAAGAA GCAAAAGCAG AAACCCCAG TAAACCCATC AGACTTCGTG
 AGACTTATTC ACTATCACTA GAATAGCATG GGAAAGACCA GCCCCCATAG GTCCACTACC TCTCCCTGGG TCCCTCCCAA
 AACATGTGGG AATTATGGGA GATACAATTC AAGTTAAGAT TTGAATGGGG ACACAGTCAA ACCATATCAT TCTGCCCTTG
 GCCCCCT

SEQ ID NO:1298: (Length of Sequence = 263 Nucleotides)

CATTGCACTC CAGCCTGGGC AACAGAGCA AAACCTCCATA TCAAAAAAAA AAAAAAAAAA GAATTGCTGA CCTTTATGTG
 TTTCTGTTTA AGTTCACAAC AGTCATAATT CTGTAAATA CAAGGCAAAA CTGTAGTTTC TGATACTAGT AATATATCTA
 ANTCACTAAG TAAAAAGGAT GTGTAAATC TTAATAGGGG AAATAATTAT TGTATGANCA AGCAATTTC AATCAAAAG
 NCACGTTTCA GTATATATT TAG

SEQ ID NO:1299: (Length of Sequence = 272 Nucleotides)

ATCTNATTGT TGTGTAGTTT ATGGCAGTGG TCTCCAGACT TTTTGGCACT AGGGACCACT TTAATGGGAG ATAATTTTCC
 CATGGACGAG GGGATGGGGA GGAGGCAGGG GTGGTTTCTG GATGAAACTN TTCCACCTCA GAAGATCATC AGGCATTAGT
 TTCTCATAAG GAGGCAAAAC CTAGATCCCT TGCATGCACA GTTCACAATG GCACTCGTCG CATATNCCGT CGACAACCCCT
 TTTTGTAGGT TCCATGCTTC CCATTGGCT TT

SEQ ID NO:1300: (Length of Sequence = 277 Nucleotides)

ACCACGAC TCCAGCCTGG GTGACAAGAG TGAACCTCCA TCTTAAAAA AATGTGTAAA ATGAAGATTA TCATACTACC
 TACATCATAG AATTGTTTTT AGTGTAAAT GTGTGTGTGT ACATTTATGT AATAGTTAAC ATTTAAGAG CACCTACTTT
 GTGTAAACAT ACTTTGTATG AGATACTGTT CAAATATATA TNCTAATATA TGCAACATAT TATATATGTN AGAATAGGGT
 CTTATATATC TTAGGAAGTT AGATCTTATA TGTTTGA

SEQ ID NO:1301: (Length of Sequence = 304 Nucleotides)

GGTGTGGGGT TATGTAAATC CCAAATAT GAACAGGAAA TGTGTACAGT GCATGATAGG TTAATTTTIN CTTTATGTGT
 GTCCAACGCA GGTCTTTTGG AGAGAAAAA AGATCACAGT GCTGACCAGG TAACTCAATA GGTTAAGTCA AGGTAACCAT
 TGAAAGATAA TAGGATTAGG GAGGTGTTTA TTTTATGGCA TCTTCTCTCA TGGAGTTCTT AGCACTTCGG ACAATTTGTC
 TTTTCCCCAC TTTGTACAGC TGTTATGTGT CATTACCAG CCGGCTGTAT TTAACITGCC TACT

SEQ ID NO:1302: (Length of Sequence = 335 Nucleotides)

AGTTTATTC CATAAGAAA ACATTTTATA AAATAATATG GTAGACTTCT ACTTCAACAT ATTCACGTAA AAACATCACA
 GTGCAAGAAA GTGATCACA TTAAGCATGA AGACATCAAA AGCCAGCCAG TATTTTAACT ACAGAGCAGA ATATTCTTGC
 TGTCCCTTCC TAGAAAATGT TGGCACATTC ATTAACGTCT CAGGTTACAA AAATCACTTC GTGTCCACTT CTTGTCTTTC
 AATATATTIN CATAACTACA CTGTGTTACA TTAATGCTGG TGGACAAATT AGCTCCTATA AAATCTAAAA ACCTTTTCAG
 GTGGGCACAA TGGTT

SEQ ID NO:1303: (Length of Sequence = 316 Nucleotides)

TGGAGCTGTA TATGGTCCGG AGTTATATGC AGCATCCAGC TTTCAAGCAG ATGINTCCCT AGGCAATGAT GCAGCAGTGC
 CCCTATCAGG AAGAGGGGGT ATCAACACTT ACATTCTTTT AATCATTCCT GGCTTCCCTT ACCCTACTGC AGCCACCAG
 GCAGCCGCTT TCAGAGGAGC CCATTINAGG GGCAGAGGGC GGACAGTATA TGGTGAGTTC CGAGCGGTAC CTCCAACAGC
 CATCCCGGCC TATCCAGGTG TGGTTTACCA GGAAGGATT TTACGGTTGN TGACCTCTAT ATAGATTCTG CAAACT

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TGTATAGCTG CCAGACCAGA CCCAGATAGA CCATAATAAA ATAAAATACA CAGTCAGTTT TTAATGCAAG CCAGAATGAC
TCINCTGTAT CTTTAGCCIT TOCAGGGGGA TACAGTGAAC TCAGATATCC CTGCTTA

SEQ ID NO:1291: (Length of Sequence = 317 Nucleotides)

CTATAATCCC AGAAGTTTGG GAGGCCGAGG TGGGCGGTC ACCTGAGGTC AGGAGTTGAG ACCAGTCTGG CCAACATGAT
GGAACCCCAT CTNTACAAA ATAAAAGCA AGATATGCAA AATAATGTGC CAGINTGGTG CGTATACCT TTAGTCCAG
TTACTAAGGA AGCAGGGTGT CTNAAACAGA AGAATCACCT GAGCCAGGG AGGTGAGGC TGGCTAAAA TAGATCTGGG
GGTAGTGGTT AATNGGCCCT TGTGAATNAT TCAGCATAAG GAACTGTCCA ATATTTTTTT AAGCTGTGAG AAAATCC

SEQ ID NO:1292: (Length of Sequence = 293 Nucleotides)

GAAGATGGAA ATAGACCACC ATACAAAACA AAAAAGACAG AAGAGAATAT TAGCACTCTG TTGCAAAGGA GAATAGGTAT
GCTCAACTGG TAAGTAGAAT GCAAATATTC CAATATCTGA AAAAAATCCC AAATCCAAAA TACTTCTGGT TCCATGCATT
TTINCTAAGG GATACTCAAC AGGTATTTTA AAAGATCAAA ATACAGATCA GAGAATATGG ATACTTGAAG ATTATGAGCA
AACGAGGATT AAGGNAACA TGTTGGAGGA CTTTTTAAAA ATGTGTTAAA GGG

SEQ ID NO:1293: (Length of Sequence = 310 Nucleotides)

TCCAGAAAC ATTACGGTTT GATATCAAGT TCCTATTTTA AGAGTCACCC ATTTGCCAC CATAAGTNC TGGAGAAGGT
AGGGTATTAC AGGACTAACC TTCCAGTGGC TGATTCTGGT GGTTTCCACA TTCAGGTTC TCTGATTTN ACAAGCTTTT
TCCATAAAG ACTGCATTN CTTTAAAAGC TTCTCTGCA AAANAGCCAT AAATTGAAGC ACCAGTGAAG ACAATAAAGT
AACATACAGA CGTTTCATT GGGAGGGGGC CCNGAATGNG AGACAAATAA GTCCCTAGTA AATGGCATT

SEQ ID NO:1294: (Length of Sequence = 275 Nucleotides)

GAATGACGAT GTGAGGGCA TCAGGAAAGG TAAGGGCGG GAAACCGGC CCTTGGAGAA CCTGCCCAG GGGAGGCCA
GCCTACTCAC AGGNTCCGAC ACTCCAGGCA GAGCAGAGG CAGGAGAGGC CCAAAGAGCT AGGTCAAGCA GCTGGCTCC
CTGGGGTTAA ATACATGGGT TTTGTTTTA CTGCTGTCT TGATATACAT GAAGTAATGA ATACCAAGCA ATTCATTTT
CCIGCATCTT TACTTTTACA TTGTINCTTA GGTTCCTAA AACATTNAA ATACAATAAA ATGAGTGTAG CAAAAATTAT
TGAAGCT

327

CAACCTCTGC CTCCGAGTT CAAGCGATT TCCTGCCTCC CGAGTAGGTG GGATTACAGG CATGATCCAT CAGCCCCAAC
TAATTTTTTA TTTTAGTAG AGATGGGGT TCTCCGTTT GGTGAGGCTG GTCTGAGCT CTGACCTCA GTTGATTAC
CCACCTCGGC CTCCAAAGT NTGGGATTA CAGGTGTGAG CCACCGGCC AGGCTACTGG TCTCAATTCT TTTGGATACC
CAGAAGCAGA AATGCTGGGA TCACATGGTA GTCTC

SEQ ID NO:1296: (Length of Sequence = 247 Nucleotides)

GGAAGGAACA ATTGATAAGA ACCGGGGACA TCAGGGAGAG AGAGTATTTG AGCTGGGCTT GATTCCATCG GGTAGTATCT
GGAAAAAAA AAAAAATCC CAGATGAAG AATGTACAA GACATGAGCA TGAGGGCAC ACTTTGGAAA ATGGNGAAG
TCTGACAGGC CTGGGAGAAT GAAGACAAGT TAGCACCAGN TTNAGAAGGC CTTGATTACA NGGCCAAAC TTTGGATT
TACACTA

SEQ ID NO:1297: (Length of Sequence = 246 Nucleotides)

316

TTTTTTCACA AGGIGAAAGA CCTTTATGGA CATGACAGAG AGGACCTGAG TTAAGAGGGA AAATACATCT NCATAGCTAG
 GTTCACATTC AGTTATGTTA GTCCCAAACC TACAAATTCA ACATGATCCC TATTAAAATC CTACCAATAT AGTTCAAAAG
 CTGACAAGT TGATTGTINAC ATTTATATGA GAGANTAAIT AAAAAAAAAA AAAATAGGGC CAGGTGCAGT GGCTCAGCC
 TGTATCCCA GCACITTAGG AGGCCAAGGC GGACAGATCA CTT

SEQ ID NO:1285: (Length of Sequence = 341 Nucleotides)

CATTCINATG ATGTAGAGGC CAAAATGGTA TTINATAAAG AGGAAATTAC TTCTGANCCA CCCCAGCTGG AAACACTGGT
 AGTATCGGCA GCAGATGTGA TTACATCCGT TTTGGTATTA CACATCGTAT TTACAGCAGA CATGACTGAN CTGGGAACAC
 TGCCCTGTGA GACAGCCTGA AAGTTTTTIN CAGATTTINT GTGAACACTG TCTGAATTCA CATTGGGCAA AATGATTCTN
 CCAGTTTCTC CGGCTTCTGC TAGTTTGAGG CAATCTGTTT TATGTGCCCC AGCTGAAGAT CTTTCACTAA CTCGATCTTT
 AGAAGCTAAC TGCATTGCTG G

SEQ ID NO:1286: (Length of Sequence = 354 Nucleotides)

GCCTATTTC TACAAAGTGT GCATGINAGC GTGCGTGTGT GINTGTGATT TTCCCCCTT TAGGTGGTTC AAATTTGGAA
 TTTGTGAAGG CAGAGCTGAT AATTAGAGAC AATAAAAATC TGCAGAGTAG ATGGTTCAC AAACAAGACT ATGAAAGAGG
 GGATAAAGA AGAGGTCAAG AAAGACTCAA GAACAGTATA TAGAATAAT TCAATTACAT TATGTGTATT TTAAGAAAA
 CATGTTCAA CTGCATGAGA CAGAAAATAG CACTNGTTA TCCTCTAGA CTTCTNAAAG TTTTGAGTTT GTCTGCAATC
 TCTTCCATT AATGNCITT TGCCATCTTC AGAA

SEQ ID NO:1287: (Length of Sequence = 354 Nucleotides)

CTCTCTACC CGGTGGCCTA TAGCCCCCAA CGTGGTCAGC AGCTGCCTCA GCCATCCCAG CAGCCTGGTT TACAGCCCAT
 GATGCCTAAC CAGCAGCAGG CGGCTTACCA AGGCATGATT GGGGTCCAGC AGCCACAGAA CCAGGGCCTG CTCAGCAGCC
 AGAGGAGTAS CATGGGGGGC CAGATGCAAG GCTTGGTGGT TCAGTACACT CCACTGCCTT CTTACCAAGT TCCAGTGGGT
 AGTGACTCGC AAAATGTGGT CCAGCCGCTT TCCAGCAAC CCATCTGGT CCCTGTGAGC CAGINTGTGC AAGGAGGCCT
 NCCAGCAGCG GGGGGTACCA GTGTACTATA GCAT

SEQ ID NO:1288: (Length of Sequence = 231 Nucleotides)

TTTACTTAAT TGGTATAGAT TGAGGNTCAT GCATCANCAA GCAGTTTGA AATINTCCCC AAGTGATTCT NACCTGCAGC
 CTGGGTAAAG AGTCGCAGG CTCTGGATA GTCAITTAAGT GAAGTGTGGT AAGCACTGAT GTAGCAGGAT TACCTGCCCT
 ACTAGGTGCC GGAAGTGCAT TTNCTGTCT ACAAGTAATT TTTTAAATG TATGCTCGCA TCCCTGCCTT G

SEQ ID NO:1289: (Length of Sequence = 329 Nucleotides)

GGCACTGTG AGGGGAAAGG ACAATTTTAA AATTCTTTT CAAGGAAAAA AAAGGTCTTT ATGCTTTGCC ATGAGGCCAC
 ATTCACTGC TATTTAANCT TAATATCTTG AACCTAAAGA ATGCTGACTT TNOCTACATT TCCAGAGTTA GGCAGTATTC
 TACACTTAAA GACTACTACT ATTTINATAA AAGGTAATCT ATTCAAATTT CTTCACAGAT TTCCCTTGCT GGGGATCAGT
 TAGTAAAGAA GGAGGAATTC CTCTTACCA AGAGGAATTG CATTGCTTTA ATTTAGCAAT GTGAGGTAAG GCCTGCCNAG
 TGCCCAGGG

SEQ ID NO:1290: (Length of Sequence = 297 Nucleotides)

GGAGGCACAT GTGCAGCTTT GTTCATGGG TAAATTGCAT GTTCTGGGG CTAATGTGGT TTCTTTTACA GAAAAAGTA
 TCAGAAATAA TCGGTAACT TTNCTACAT GGTCTTAACT CTCTTCAGG AAATATCTAA CTGTAAAGTG CAATCCTTCT

315

GGACTTGTTAC CCTGGGTGGT GAGAAGACCC TGATTGGTTT TATTAGTGCA TTTCTGTAAG TNACTGGGAT AATCATGTTT
 AGTTCAGCAT TTTATGTGAG TTTCTGAAAG CNCTTTAATC AACTCCATAG ACAAGATTAT AGTGTGTCAC AGCAATAGGC
 ATGGGCCATG TCTGCACTGG AGGTAAAGTTG CAAGGTACAC CCACGGGTGA TTTATCACTC TTACAAAGAT GATAACTAAT
 GAAGACCGCA TCTAGAATGC TCTTACTGGA GATGGTTTAC AGAGCATTTT TAATCATCAT ACTTAGATTT ATATTAAATAT
 TTCTTTTCAA ACTAAATTAT TCCAAACTGT GCCC

SEQ ID NO:1279: (Length of Sequence = 347 Nucleotides)

CCACTTCAGT GCTTCTGTGT CCCGAAAAGA TCTTTTGACG CATAGGGCCT AACTGTAATA CACTTAAAGG ATAAGTCTCC
 ACCCCAAGGT GAACATGGGT CATGTGTTAC ACGCACATTA GTTCATTATC CATGTGTGAG GACCTCCTTT GTGAACAGTC
 ACAGCTCCTC CTATAACCTG TTAAATATGT ATGTTTGATC AACCATTCA ACTTAAATNC TTGTCTTACC TCTCCTTCCC
 TCAAAGTGCC TGGCTATACT TCCCAGCCTG CGGGATGGCC ACCTTGCAGG ATGGAACCTT TTGTAAGAAA TAAAGTCTCC
 TTTCCAAATG TACACATTGT ATGACTT

SEQ ID NO:1280: (Length of Sequence = 344 Nucleotides)

ATCCTTAGCA TGCCTGINTT ACTGAGACCA TAAACTTTTT TTTTTCCTT CTGCCTTCAC CCAGTGTGTG TTAAGTCTTG
 CTTGTTAAGC TCCCACACTT AAATGGCTGC TTGCAGAATT GCAAAGGGAC TAGGGAGAGA ACAAACAG ATATGCGAGT
 GGTGGTTGTT AACCAGACAG GATTCTAAG GAGGGTTCAG GCAGTCAAGT GGTTTTNTGT ATGTTTTTTA TGTTCATAGT
 TTTGAGTTTT ACAATGTGTG AAGCTTACTT TTGCTAGCAT TAGGTATAGT TTAFTTTGAA AGAATGAGGC TCCTGAAAT
 AAACATGCCC AGTAACTAT ATCT

SEQ ID NO:1281: (Length of Sequence = 331 Nucleotides)

TGAGGAACAT AAAATGGCTT GGTAAAAGTA ATAAATCAG TACAATCACT AACTTTCCTT TGTACATAAT ATTTTGCAGT
 ATAGATGAAT ATTACTAATC AGTTTGATTA TNCACAGAG GTGCTGCTCT TTAATGAAA TGAAATATAT AGCTAATGTT
 TTTCCCTCAA ACTCTGCTTT CTGTAACCA TCAGTGTTTT AATGTTTGTG TGTCCTTCAT AAAATTTAAA TACAATTCGN
 TATCTGTGTT CCAATGTTAG TATGTATGTA AACATGNTAG TACAGCCATT TTTTTCATAT GTGGAGTAAA AATAAAATTA
 GTATTTTTAA A

SEQ ID NO:1282: (Length of Sequence = 310 Nucleotides)

CCATGTCAA TGTAGTTTAC AAAGGGAAAG GACAAGTACC TTINTATAGA ATATACAGAC ACAGCATCAC ACCACAGGGC
 CCACGGGAGG GTCGGGGAGA CGACACTTTT TCCCTGGGAA AGGCAGCTCT AATCCCAGGA ATGGTTCTCN GCAGAGGCTG
 GGTGGCCAGG AGCACTGTCC TCTAGCCCC TAACTCAGCC TCTGCTTCAN CTCGGTCCG ATTTCCCTGCC TCTACCCCC
 AACTCCTTAT AAAGAGCCCC ATGAGCTAAG ACTAAGGAGA GGTTCATNTC CCTTGGGGCG TGTGCCCCAT

SEQ ID NO:1283: (Length of Sequence = 323 Nucleotides)

ATGAGGATTA ATTATATCTG TNCACCCAC ACAGCTCCCC CATACCATA ATCTTTATTT ATTTNCTTGG TTTCTTCCIT
 ATACCTTGT TCAGGCATTA AACCATACC TGTATTTTAT NCTATCCTTT TCAAAACAGG TGTGGACCAT GCACAGATGA
 CCTATGACGG GCAGCACTGG CAGCCACGG AAGCCTGCTT TANTTGTGCC CAGTGTAAAG CCTCTTNTT GGGATGTCCC
 TTCTTCCCA AACAGGGTCA GATTTACTGC TCAAAACGT CGAGTCTTTG GGTGAAGACG TCATGTCCT CTGAATCTCT
 CCG

SEQ ID NO:1284: (Length of Sequence = 283 Nucleotides)

314

GTTTTAGATA TTTTAAGATA TTTAACTGTC CCTGTGGCT TTTAAGGAAA AAATAAGTAT AAATNCTTGA ATATTAAGAN
 TTTTAAATCA GCTAAATTCA GGGCCAAGAA CTATTTAAGA TGATTCANTG AGAAAGAAAA GGACCTAACC TGGAAAAAGA
 GTTTCAAATA TGCCAGTACG TAGGGTATTT NTGGAAATAC ACAGTCTAAA ATTAAAAATT NNAACTNATC AATGGAATTT
 AAATCTATAG CACTTTAAGG CTGTGGAGCC CAACANTAGG GGNACTTTG GGGGCACATG ATCTTTCAA ACATAAATTA
 GGG

SEQ ID NO:1273: (Length of Sequence = 368 Nucleotides)

GCAGCCTGGG CAACAAAGCG AAACCCTGAC TCAAAAAAAA AAAAAAAA AAAGTCTCTT AATCACAACA GCAAAGCTCC
 AAAAGTTCAA GCATCACAGG TAGCTAGTGG CTACTATATA GGCNAGCACA GACACAGAAC GTTCCAACA TCACACACAG
 TTCTANTGGG TAGCAATGAC CTATACTGCT GACCATGCTG NCCAACATGT NTGCAGCAGT CCTCATCCC TCTGTNGTCC
 CCTGTTACAA GCTTAGANCC CCTCCNNAC GCTCCTCCCC CATAAACAGG GCAAGTNGGG CAGAAGGTGG AATCCTTTTC
 AGGGGGCAAA T

331

GCAATGGGAT CTGGAGCCAA AGAAAAATAT ATCTGAGTTC TAGCTCCTCA CTAAGTAACT GTGTGATAAT GGGTATGTCA
 CTCACCTCTT TTAGCAGTTG GGTCTTTTAT GTGTAAAAGG GAAAAACATA TGCCTACATC ATAAGGCAGA TGTGAACATC
 AAATGTTATC AGTAACTGTC AATCTGTTTT ATTAATTGTA GAATGTCCAA AATATTAGTT TGTATGGACT TCAATGAGTA
 TGTFTGTGG AGTGGAGTGG GGGAAAGGGA TCATTGCTTA CCTCTGCAC ATATCATGTT TCAGCTAGT ACAAGGCAGC
 CATGAGCACA AAGGGCTAAG CTACTTAAAT CAGNCCCCAA ACAACTTC

SEQ ID NO:1275: (Length of Sequence = 319 Nucleotides)

AGATTACTCT TTGCAGAAIT TTGGTTAATT GTGAAGCTGA AATATCCTGA CTCTACCTCA AAGTTAATGT TTTAGGTAAC
 TGAACAGGTA TTCTNCCCAT TACTAGTATT GAAGTCAGAA TACAGAAACA AATAGTTACT GCCAGAAGCA GAATGGAAGA
 GCCAAAAAGT ACACAAAATG GACGCCATAA ATNCTGAAAT AAAAGTGTAT GATGTGTCTT GAGTCACTGT AGAAGTCATG
 CATTTATTAT CAAGATAGAA AAGAGCAGAG AATGACGTGG GACATTGGTC CTCGGAGGGC TTCGTANGTG GTTCGGTCC

SEQ ID NO:1276: (Length of Sequence = 324 Nucleotides)

CTGCATTGGG CAGGACAAAA CTGCCAGAT TCAGAAGGTC ACGANTCATC TGGCCTTTAA TGCTGATATC CAGTGGAGAG
 CTGGAGTGGG GGCTTGGGGA AATATTGACT TCCAGGACCC AGGGCTTGAG GTTTTCNTCT AGCATGATGT CAAAACCAA
 GAGTTCATGG CAGCTATAGG GCGGTGCGAC ATACATCTTG AGCAGGCTGG TCACATAGGG CTCTGACGAG ATGATAGTTT
 TGACAAACAC ATCCTTTATC TTCTCCAGA TGGGTGCGCT ATTGATTNCC CTTCTGGGCT CAGGTAGTTC CACAAAAGCC
 TTCA

SEQ ID NO:1277: (Length of Sequence = 388 Nucleotides)

AGCAAGGCGG TGGGGTAAGT NTGGACCTTT GTGTACCAGA GAGAACATCA TGGTGGCTTT CAAAGGGGTC TGGACTCAAG
 CTTTCTGGAA AGCAGTCACA GCGGAATTC TGGCCATGCT TATTTTININ CTCTCAGCC TGGGATCCAC CATCAACTGG
 GGTGGAACAG AAAAGCCTTT ACOGGTCGAC ATGGTTCTNA TCTCCCTTTG CTTTGGACTC AGCAATTGCAA CCATGGTGCA
 GTGCTTTGGC CATATCAGCG GTGGCCACAT CAACCCTGCA GTGACTTTGG CCATGGTGTG CACCAGGAAG ATCAGCATCG
 CCAAGTCTGT CTTCTACATC GCAGCCCACT GCTTGGGGC CATCATTTAG AGCAGGAATC CTCTATCT

SEQ ID NO:1278: (Length of Sequence = 354 Nucleotides)

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CGGACAGATG TCACTCTCGC CCGAGAAGGG GGACACTGTG ATGGTGTCTT TAAGCTCATA GAGTGGCAGG TTGTCTGAAA
 TGCCACCATC CACGTAGGCG ACCCCCTGGA GGGAGGGAGG GATGAGCCCA CAGTACACGG GGATGAAACC NCTGCAGACA
 TTGGCCTGGA TGAGCTCGTC CTGGAGTTN AAGTGGGATA TAATGACATT NTGGCCGTCT GACAGCGGGG TCAGGGAGAT
 GCCCAGGCGC CCACTGGCAT GCTCATGGCT ATCAGCAGGC AGGACCTTNA GCAGGAAACT CGGGATGATC TTTTACCAGG
 TT

SEQ ID NO:1267: (Length of Sequence = 310 Nucleotides)

GTAACCCATC CCATAGGGTT GINCIATGTA TTCTTGCCAG GTGGGGTTGG AGCACCTTGT GAGCTCAGCA GCCCAACATC
 GATAGTAAGG GAGTCAGGT TTCTTCATCT TCCCTAGAGT TAGAACTCAC TTCTACAGCC ACTGTGTGAG GGACCACTTT
 GAGCGCCCTT GGCACCTGCT GGCTGGAAAT CAATTAGCT GTAATGGATC TGGCCAGCT TTTCTCTCT TGGGTATCT
 GCACTCATAG TGGTGAAGC AAGATCTACC AGATGGGGAC ATTGAGATGG TCCCTTCTC CTCTCATTT

SEQ ID NO:1268: (Length of Sequence = 338 Nucleotides)

GGGCTGCTCG TGAGGATGGG ACAGCATGTA CTTACTGGGG AGACTCCCTT GATGACAGCC TTACACGGIT ATTCATAAGG
 AGGCAGGAAG AGGCGCTAAC AGTAAGCATG TTCTGGGTGG TCTTCGGGGT GCACATGTGC AGCAGCTGTA CCGTCTGTCT
 TGTATGTTAC ATGCTCATTT AACATCTGAA ATCTCCACCC GGGAGTGTGT TTTTACTAT TATAATGAGC AAAGGTTGAG
 TCTGAGGACA GGTAAAATCA AAAATGTGCA CCTCTTACG GGGGAAATTC CTTACTGGAG CTAGTTTGGC TTGAAGNGAA
 CTGGACTACA GTGTGAAT

SEQ ID NO:1269: (Length of Sequence = 363 Nucleotides)

CTGCTAGAGA GTATTTGAGG GTCTGCAGCA TGTGTGTAAG GCCATTAGC ATATGTTAAG GCCATTAGA GCAGTAATTA
 TAAAGGGGCC CTGCTAAAAT AAATATCAAG TTCCCTTAAG AAACCTCAAA ATTATGAAAG TTTCAGGTCA TTATTTTGCT
 ACAATGANC TTAGCAGCTA AGNAAAATGT CTGCTGCTT ATAACTAAA TATGGTATAA TTATATATTN CTNTTATGTA
 TTTCTAAAGC TACATTTTCA CCTAATCTT ACTACAAAGT AGTTTCGGGA AACRAAGTAA AAGCAGGGGN AATCCAATT
 CAAATATAAT CAAATATAT

339

GATAAGTGAG ACTAATGGAA TCGTTTCCCT CTAACCTCAT AAAAATTTA AGGATTATCT TTCTTGAGTT CTCTGTATTT
 CTGTTTTAGA AGAAAAGAAC AAAATTTGAG AAACAAGATT ATAGTGCTTT TNCIAAAGTA TAAATACGTG GGCCCTATAC
 AAACCTGCCAA ATTCATTAGT CTTAAAGCAG ACATCCAAGC TATGTGGGT GTTTGGATGA CACCATTTTC ACAGTAGGAA
 ATCATTTTAT TCTGAGCGTG GGAATCGGCA TTGGTTAAG CATGAGGTTT TATGTGGTAT AAACACCTGG GAAGTGAGAG
 AAAAGNCAGC ACAGAAGCTC TGTGGGAGCT CTTCTGAGCA TTG

SEQ ID NO:1271: (Length of Sequence = 335 Nucleotides)

ATGCCCTGCG CTGTGTTGAC TGCAAAAGGT GATGTGCAGG GGTAGAGGTA GGGTACTAAT TTACAGTCAC CAAAATTAGT
 ACTGATATTA ATCAGTTTAG TTGGATTAAG ATGAACAATG TTTAATGCTT TAAGGTCAT TTTTGGCCCC AACAGGACTG
 TGCTATATTA AATGACACCG TGCCCAAAG CTCAAAAATT ACATAGAAAG TAAAGTACTT CTTGAATACT AAAACAGTTA
 AGCATAAAAG GTGTGAATT GGTCCCAAAG TGATATTAAC TTAAACATTT AATCCTACGN NCTATCTTAG CTGTACCTC
 TAAAAATGCT TAGGA

SEQ ID NO:1272: (Length of Sequence = 323 Nucleotides)

312

TGCTCTTGGC TGGGAGCTCG CTTCCTCAGCC TGTAGGATGG CCACCTTGAA GGCTGTAACC CTTTAGAAGA AATAAAGTCT
 CCTTTTCTAA ATTTATAGAT TGTATGATTG TTITAAGCTA ACAATAGCAA TGGCATTATC ACCTCACTTT CTGTGTGTGT
 GCTTAGCATA GTACCTGACA CATGGCACTT GAGTTGGTAG CTATTTTTTA ATAT

SEQ ID NO:1260: (Length of Sequence = 353 Nucleotides)

CTCAGTCAAA AATAGCAGCT GCTGAATTAG CATGGGCATA CCAGGCAAAT AAGCCTGCAT TGTATAGCG TTCCCTTGAT
 TGCNCTATGA AACTGAGTAA AGTTTCATTT CCTGATTCAA GAATTGCAGC TAAAATATCC TCTGGACAAA GAAGAAGGGA
 AATTTTTTGA TAACAGATGT GTTGACTCCT TACAGTATAA AGCCAATTTT TGTATATCT CACCAACAAT CCTGGTTTCT
 ACAGTACATC AATTTTAAGT AATGTGCCAA ATCATGGCAG CAAAATATG TTCCCTCTAG CTGTAGGGA CTTGACTTG
 NAAAACAGGN GTTCAAATC ATCTCTTCA TTT

SEQ ID NO:1261: (Length of Sequence = 294 Nucleotides)

TTAAAACAGA CAGCTAAGAT TATAGGAATA TTTTAAATAA ACAGCATTTA TTTTAGACAC ATTTCAAATA GAAGCCACAA
 TAATCAAATA GATATTATCT GAAAACGTTT CAAAATATTT AACCCCTTAA ATGTTCTTCT CTGAAAAATT AGTTTATCTT
 TAACAAATTA TTCTGAATTA TTGTGTAAC ATATAAGTAT ATGCATATAT ATNCACTTGC TGGTCTCTAT GTTAAAGCAA
 ACTAGGTAA AACTAGAGGA AATATCTGGA NCATAAAATG GTTAAACAATT TACG

SEQ ID NO:1262: (Length of Sequence = 292 Nucleotides)

ATGATGAAGG GTTGGAGTGA TGCACCTAGA AGTGAAGGAA TGCCAATGGT TGCCAGCAAA GCACCAGAAA CTAGGGAGAA
 ACAAGGAAGG ATTCTNCCAC AGTTTCAGAG GGAGAATGGC CCTGCCAACA CTGTGATTTT GGACTTCTGG CCTCCAAAAC
 TATGAGACAA TAAATNCCG TTGTCTTAGA CCACCCAGTT TGTGGAATTT TTTTACAGCA GAACTAGGNA ACAATAACAG
 TTTTTTTTIG CAGTAAAGAA GTTTTAAATC TGGGTATGT CCAATGTATC AA

SEQ ID NO:1263: (Length of Sequence = 303 Nucleotides)

GGTTGAGGTT GTGGGTAGGA TGAGAAGACG ACAGGATGAA TCTTACCCCT CAGCTTTAGT GGAATCTGT GAAACACCTG
 GGAATGTGTT AGCATCAGGA GAATTCCTCT AAGGTATGAA GAATGACAAC CTGGGACCTT TCTGTAGGT GGCTCTGAAC
 CTAATATTTC CCCAAGATT CCCAAGTGGT AGGAAGGAGG GGTGTCAGAG GGATATTAAT CATGGTCATT AAGTCTCAAA
 ACATTTCTAC TTCAAGTGAA TACATTAACC ATGCTGAGGC AGTGAACAA CTGAATGCGT AGT

SEQ ID NO:1264: (Length of Sequence = 313 Nucleotides)

GGGACTACAT CAAGCACCTG CGGACATCT GCGAGGGCTA CGTCCGGCAG TGCCGCAAGC GCGCAGACAT GTTCAGCGAG
 GAGCAGCTGC GTACCATCTT CGGGAACATC GAGGACATCT ACCGCTGCCA GAAGGCCTTC GTGAAGGCCCT TGGAGCAGAG
 GTTCAACCGC GAGCGCCAC ACCTGAGCGA GCTGGGTGCC TGCTTNCCTG AGCATCAAGC CGACTTNCAG ATCTACTCGG
 AGTACTGCAA TAACCACCCC AACGCCTGCN TNGAGCTCTC CCGGCTTACC AAGCTCAGCA AGTACGTGTA CTT

SEQ ID NO:1265: (Length of Sequence = 290 Nucleotides)

TTTCTATGTG TAAGAGAAAA TAGAGATGGG TATACATACT GTTGTITTTT TTGAGCCGAG AAAGTGTGTG ACCGGGGCCT
 CAGGTGGTGG GCATGGGGG CTCTCTTGC AGATGCCCAT TGGCATCACC GTTGCAGCCA TTGGTGGCAG CGGGTACCGG
 TCCCTTNTTG TTCAACATAG GGTAGGTGGC AGCCACGGGT CCAACTCGCT TGAGGCTGGG CCCTGGGCGC TCCATTTTNT
 NITCCAGGAG CATNTGGTTC TTTGGCGGGA CCCACGCAGC CTTGAGGATT

SEQ ID NO:1266: (Length of Sequence = 322 Nucleotides)

311

TTGCTTTCAA GACAACACTC AGTTGCTAAA CCCATTTCTT TTTCTTTAGG ATATTTTCAT TGTCTCOGAA TTTTAGAGCT
 GAAAAGTGCC TTAGAGATCA TCTAGTTCAA CCTCTCCGTT CAAATGGAGA ACCTGAGCCA CTAAGNTTCA CAGNGAGTGA
 AGATAATTGA GCAACAACCT CCAAGTAATG ACAGAAAATT ATAGGAGAAT CAGTACAAAC TGTGAGAAAT TACTATGTTG
 TTAGCATCCT AAGTATGAGT TTAGAAAAGG TAGAAGTTAT AAGAAAAGTT AAATTGTTTT AATATGAATG GGATTCCTCT
 GTTACCTTCA NGNTAAAATG GAGACATACT TTTTNCCTTA GGTATTATAG TTAAACGAAT ATTGTATCCN GTG

SEQ ID NO:1254: (Length of Sequence = 377 Nucleotides)

CAAAAGCAAG GAGATGAGTT GAAAGACAGT TTTTNCCTTA GTCATCAGTA TGGGATGTCA GCAGAACAAA AATTAAAAAG
 AATAATTINC CTTTTGATCT AAAACTTCCT TAGTTTGAGC AGTAGGTGCT ACAAATTTAT TTACATATCT TAGTATCATA
 GTTAAATGTA ATGTGTTTAG GAGAGGAAAA CAAAAGATAC ATTTCCTTTA AATTCATTAA GAAATTTTCA AATTCACCTT
 GTAGCCCATG CTGNATAGAA TTGGGCTGTG TTGGTACATT TGAAACACTG TTTATGTTGC TTGAAACACT TATTINTTTA
 ATGCGCGATG TGATGATGCC TATGGCCGAG ATCANATATA GCTAGATTGG CTAGGCT

SEQ ID NO:1255: (Length of Sequence = 307 Nucleotides)

ACAAATGTTA GCTTTCTCTG GCCTAGAAAA AGAATAGGNT CATCAAGTCA TAAAACGAAG TATGINATTT CAGCACCTCC
 ACAAATGGC TTCATCAAAG AAGAGAATCC CATCACATGT TACCTCTCCT CTCTAGGTTC TTCAGCTGGG GCTTTGCCTG
 CCCCTCTACC TATGGCAGAA CCCACTGACT CGTGGNCTTT CCAGCACTTC CACTTGCCCTC CATTAGACAC TTAACCCCGC
 TGNCCGCTGC CTCATGCCAG GGAGGGCCAA TCTCCAGNCA ATGCTNCTGC TGGCTGTATG ATGACTG

SEQ ID NO:1256: (Length of Sequence = 326 Nucleotides)

TTGAGAAAC TGCAGAAGCT GGAAGGTCAA TCTCTGACCT TCTTTCTTGA GACACCTTCA TGTGACAGGT GTCCCACTTT
 ATGCTTGGAG GGAAGGAATG ATAACACAAA GATACCAAGA AGAATGTGAA GAGACCTTTC TCAGTTCCCC CCAGTTCAAG
 ACCATTATAT CGTACCCACT TTTGTCTAAT CANGCTTCTA TATGACTATC CATTCTTTAT CAAACTAAA CATAGAAATA
 TAGATTATC TCAATTTCTG TCTTTGNTTC TGAAGGCTCC TGTGTACAT AAAACTTACA TTAAATAAAT TTGTATGCT
 CTCTTG

SEQ ID NO:1257: (Length of Sequence = 224 Nucleotides)

TTTTTTNAGA GGGATTCTCA CACAGTCACC CAGGCTGGAG TNCAGTGGCG TNATCTTGGT TCACTGCAAC CCCTGCCCTC
 NGGTTTCAAG CGATTCTCCT GCCTCAACCT CTCGAGTAGC TGGGACTACA GGCACCTGCC ACCATGCCCA GCTGATTTTC
 CTGTTTTNAG TAGAGACGTT GGCCAGGCTG GTCTCTTAAC TCCTGACCTC AGGTGATCTG CCCG

SEQ ID NO:1258: (Length of Sequence = 329 Nucleotides)

CAGGGGTTTC TTTCCCTACC CTTGTGAAA ACCAATCAAT TACTAGATGA GTGGATGGAT GCAGAAAAAT CTGGGCTGAG
 CCAAAGTCCC TTTTGGAAT ACAAGCCATA ACAITOGAAG GACATCAGCG ACCTTGGCTT GTTTAGGTGA TTTTNCCTCC
 AGCTGCAGGT AGTCTTGACA AGGAGCGTTT AANCAGAAGG CTCAAGATGC ATTCTTGTG TAGGTGGGNG AGAGCACTTC
 TAATGTTAAG TGGGGTACAG NTCAGCTGCC CCCCCAGTA GCCTGGACAT CGTCTTNTCC CCATTAATCCT TNNCATCCCT
 ACAAGGTCC

SEQ ID NO:1259: (Length of Sequence = 374 Nucleotides)

GGTCATATGT TACATGCATG TTTGINCAAT ATGTGTATGT CAGNCCATC TTCACAAAT TNCATAGCCC CTTCTGTGAT
 CTGTAAATA GGTATAFTTA GCCAACCTC TCAGCATAAA GTCCTACCC CAGCTGCTCC CCCTTCCAAG TGCCCTGCATC

310

GGTCTTGCCG GAGAAGTACC CCCCTCCAAC CGAACTTTTG GACCTGCAGC CCTTGCCCGT NTCTGCTCTG AGAAACAGTG
 CCTTTNAGAG TCTTTACCAA GATAAATTTT CTTTCTTCAA TCCCATCCAG ACCCAGGTGT TTAACACTGT ATACAACAGT
 GACGACAAAG TGTTTGTGGG GGCCCCCAGG GGCAGCGGGA AGACTATTTG TGCAGAGTTT GCCATCCTGC GAATGCTNGC
 TGCAGAGCTC GGAGGGNCGC TGTGTGTACA TCACCCCAT GAGGCCCCTG GCAGAGCAAG GTATACATGG ACTGGTACGA
 GAAGTTNCAG GACAGGNTCA ACAAGAAGGT GGTACTNCTG GACAGNCGAG ACCAGCACAG ACCT

SEQ ID NO:1248: (Length of Sequence = 225 Nucleotides)

AATTTGGAGA AGATAGAAGT TTGAAGTGA AACTGGAAG ACAGAAGCAC GGAAGGCGA AGAAAAGAAT AGAGAAGATA
 GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA GTAGGAAGCA GAAGAAAAAA
 GACAAGCTAG GAAACAAAAA GCTAAGGCA AATGTACAA ACTTAGAAGA AAATTGGAAG ATAGA

SEQ ID NO:1249: (Length of Sequence = 393 Nucleotides)

CATCTATAGT CCATACATAT CTATAATGGA CAGAAATATG AGAATGAATA AGCAAAGATA CTTATGTACA CCAATAATAA
 AGTAAGAAAG GTAAAAAAT TCATGTAATA AGAAAAAATA ACAACCCAGA AATTTAAGAN TTAAGTAGTA GTCAAATCTA
 ATTGGAATAA CTCACCTATA TAAANACAA GAGGAAGGAA ACTTTATACA TAGGTCTGGA AAATATCACA ACTATGTCC
 CAGAAGANIG TTTATCTCCA CAGCATCCAA CCTAGTGTC TGCACACAGT TGGGACTCAG CCCTGTGTGC CTGATTGATT
 ATGAAGNCAG TCACTGTGAT CAACCCAACA GTAATTGAAC GTTCATTTTT AATANGGTCA GTGTTAAATC TGT

SEQ ID NO:1250: (Length of Sequence = 391 Nucleotides)

CGTATGTATC TTINATTTAC ACTGCACACC TTGCAGCATC CTTACCTTGC AGAGTACTGA GTCCTGGCTT CATGAATTIN
 ATGTCAAGTA AATGGGTTTT AGTCATCCCT AGTTTCATGT CATGTCNCCGA GAAAAGGGG AGCTTCTAAA ACATGTGCGC
 AAACCACAGG AACAGTGCA ATCCTGTGTG TCTCTATTTC CACTTACTCC TCAAGGCCCC AAGGTAGGAC GCATGTTTGG
 TGGCTTTCTG GCTTACAAGT TCCAGTGCTT ACTCCCATTC CCTCAGAGGT TTGCTGTGAT CACTGAGGGG AAGCAGAATG
 GAGCATCGTG TGTCTCTTAC TGGAGGACTC CTTCAGCAC CTGAAACAAC CCAATGTTGT TAGAGGCAAA T

SEQ ID NO:1251: (Length of Sequence = 320 Nucleotides)

GCCTCANAAG GTCCTTCCCA GGCTTCTCGC AAAGGAAGGC ACTGCCTCTN CACACCTTGT GAAACCTTTC CAGGACCTCC
 CAGTCAGAGG CCGTCTGGTT CTCCTGTCT GCAGAGCGCC CTACAGCCTG TCTGTGGGTG AGCGTGTCTG TNAACTCTTG
 TCCATCTCTT CTGTGATCTG TGTGCTCCTC GAAATAACTG ATTTTNTCTC ATACACCTTG GAATCCTGAG TCCACAGAAC
 AGAGGCTCAT ACAAAGGAAG CTTTCAAAGA GTGCTCATCG ATTTCTAGGN TTCTTGAAGA CAGGCACCAN GTTTTGTCT

SEQ ID NO:1252: (Length of Sequence = 367 Nucleotides)

CAAAAAACA AAACAGTTA TGCAAAAACA AGAGTACAAA ATGCCCTTIT CTGAAGCTCA GTTTGAGAAA CTGATTTTCN
 ATCTAGCTTA TTGATTATAC TCAGTTTCAA TTCTCCCTGT GCAAATAATA CATAAAGTCA TTAATGATGA TTGATGANC
 TGAAATCATC TTGCTTAGG ATCGTTTGAC ATCATAACCC AAATATAAAA AAGTTATTCA AGATTACAG AGATAAACA
 GTGCCTCGGA AACATAATTC ACCCATGTAT ATATAATANT TTNGAACAT ACTTTTAAA CATAAATCA CAGTCAAGGC
 AGTGATAGCA TTGCATACTC AGTGCAATTAT TTCATGTAGT GCCTTCC

SEQ ID NO:1253: (Length of Sequence = 393 Nucleotides)

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SEQ ID NO:1241: (Length of Sequence = 350 Nucleotides)

GGGGAGGCGG TAGGGTCTGC NCTGTCTGTN AGGGGCTTGT GGCTTGGCGG GTGGGCTTTG CATGGTCTCG CCTCTTGAGT
CCAGCCCCGT CCTGATGGGG CAGACTTCTG TNCGTNCTGC TTCTGGGGTG ATGTCAATAC TGAATGAGAG GGCAAGAGAA
GGGGAAGGG AACCGCCCAT ATGTNCTTCA CGTGTGCAA GGGGCTGTN TGGTTCCCAT GAAATGGTCA GCAGAGACTT
TGGGATGGGT ATGACTCGTG GGTACAGGG TTGACTAGAC AGAATCTAAA GAAGGTGGGT GCTTAGCTNG GAAGTCTTCA
GTAGGAACGG ATCACTGTGA AGCTCTAGGG

SEQ ID NO:1242: (Length of Sequence = 392 Nucleotides)

CTCTTACGAG TGAGGTTAAG TATTGAACAG ATATTTAAAA GCTATAAGCT TTAAACAGA ATAGGCATAT TGCTGATACC
AGTATTTGAC AACCGCCTTG TTTTTCAGA TAAGAAACT GAAGCACAGA GACCATAAGG CATCAGCCTA TGGTCATTCA
CTTCGTGGTA GTCAGGTGGG AGGTACACACC AAGGCCCTCT GGCTACTGAT AATCTCTGTA CTAGGCTGCT TTTAGTAAA
CTCTTGAATG AATGAAAGAA AGAACACATA CTGTTGACTT TTGAAGTTGA ATCTAAACAA AACCTATGTT GAACTTTAAAG
TCTGTAATCT AAGAACTATC AAACTTAAAC TTGTTACAAA AGGNGGTGAT GAGCACAACC ACTTCTTTTT GG

SEQ ID NO:1243: (Length of Sequence = 377 Nucleotides)

GTGGGGCAGG CGTGAGGTAG GGGTGGGGTG GGGATGACAG TCAACACAGC TTGGACCAGA AGCCCATGGC GCCTGGNTCC
CTGGAAGGC ACAGGGCACA GACGGATGCC GCCTTTINTG CTGGGACACT CCTGCCACCA TCCACAGCTC CCGGTCACT
CCACGTCTT GTACTTGGTG AACAGGTGT AAAGAACCCT CAGGTGGAT TTNAGGTCCA AGTTAACCAC GTCTTCAGGA
CGAGCCTTGG GTTNTTINAG GCCTCGTCC AGCATCAGCT CAAAGGCGAA GGACACATIN TGGACCTTCT GATCGAAGCT
TTCCGGAGTC AGGTAGAAGT GGTGGAGAGG AACAAAGTAG TCTCCAGAA GGCCCAT

SEQ ID NO:1244: (Length of Sequence = 312 Nucleotides)

ATTTTNCAT CAATGTTTAT CAAGGATATT GGCTATAAAT NCTCTTTTTC AGTTGGGTCT CTGCCAGGCT TTGGTATCAG
GATGATGCTG GCCTCATAAA ATGAGTTAGG GAGGATTCCC TCTTTNCTA TTGATTGGAA TAGTTTCAGA AGGAATGGTA
CCAGCTCCTC CTGTACCTC TGGTAGAATT CGCTGTGAA TCCATCTGGT CTTGGACTTT TTTTCTGTTG GTAAGCTATT
GATTATTGCC TCAATTTTCA AGCCTGTGT AGGTCTATTC AGAGATTCAA CTCTTCTG TTTTAGTCTT GG

SEQ ID NO:1245: (Length of Sequence = 320 Nucleotides)

GGAGATCGTG CACATCCAGG CCGGCCAGTG CGCAACCAG ATCGGGGCCA AGTTCTGGGA AGTCATCAGT GATGAGCATG
GCATCGACCC CAGCGGCAAC TACGTGGGCG ACTCGGACTT GCAGCTGGAG CGGATCAGCG TCTACTACAA CGAGGCCTCT
TCTCACAAGT ACGTGCCTCG AGCCATTCTG GTGGACCTGG AACCOCGAAC CATGGACAGT GTCCGCTCAG GGGCCTTTGG
ACATCTCTTC AGGCCTGACA ATTTTATCTT TGGTCAGAGT NGGGCCGCA ACAACTGGGC CAAGGGTCAC TACACGGAGG

SEQ ID NO:1246: (Length of Sequence = 275 Nucleotides)

TTTTTTTTTT TTTTPTTTTT ATCTGACAGC AATAGATTTA TTAAGTATCC CCGAAAATAT AAACACAAAC CAGTAAAAAA
CAAACCGTA AAACGTCAGG CCTGGAGCTG CAATAAGACA GAGACAGGAG CAGCTCACAC GTGGCCTAGG TGGGGAGGAC
GAGGCCATAA ATACTGCAGG AGGGCGGCAA GGGAGCCCTA GGGCGAGGGG AAAGCAGGGT NTCGGCAGCG AGATGGCTCC
GGGGGTTTAG ACACTGCTGG CTTCGGCCCC GGCCG

SEQ ID NO:1247: (Length of Sequence = 384 Nucleotides)

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CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGTNCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG
 CTTGCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGA CTCTAAG CTCAGTGCTC TCTCCACTAC
 CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA
 TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCTGGGTA ATTTTGTAT TTTTAGTAGA
 CACGGTTTCA CCATGTTGGC CAGGCTGGTC TGGAACTTCT GAGTGTAAT GATCTGCCCA CCTTTG

SEQ ID NO:1236: (Length of Sequence = 401 Nucleotides)

AGGATGTACT TCTAGTAATG TCACTGAAAG CAGATATCAA AATTCATTAC CAGGAGTACT TTGCTGTIGA ATGGTTCCTG
 TGCCATACAG AGATAAGATG GAGTCTTTGG AAAGTTGTTT CTTTGCCACT TCTTCTGATT TINTAGTTTG CTCAGTGAAT
 AAATCTAGAT CCCAGATGT TACTGTAGAC AGGGTTGCAG CTGCTGGTGC AGAGGGTGTG CCTTGAGACA AACACCAAAA
 TAAGCTATCA AATTCTGCAT AGTAAAGCGC ANTAAATCCA TTACTTAAAA TCCAAATAAA GTTATAAAAT TAGATAGGAA
 TCAAACAATT GTAGAAGGTA AAATGGTGCC ATTCAAGAGG ATCACTTACA AGCCAGCCC ATATAAAACC ATCTACAATC
 A

SEQ ID NO:1237: (Length of Sequence = 372 Nucleotides)

TTAACTCTTT CINTCTTCA GTCGGATTAT AGAGTTGAG CAAATGTCAT GATGANCITT NAGGCCTAGG CCTGGNCTCT
 TGAGGTGTGT GTG:GTGTGT GTGTGTGTGT GTGTGTGTGT TTCTTTCTCC ATAATAGTCC CAACCCTAAA CAGGGGTATG
 GCACAGTACT TCTTATGAAC AAAAGTGCTA TTGGTCTACA AGGGGACTTG AGCCTGCACT AATTGTATTT GATTAGGATT
 TTGTGCTGT CTGTATGATG TTTAACCACA CIGTCAATTA CAGACTTCCT TTAAGGAATT TCCAGGAAAC CCCCTTACCA
 TAAGAGTTTA AATTAATAGT TTNCTAGTTT AATGACAGCA GTTGGTAAAG GA

SEQ ID NO:1238: (Length of Sequence = 304 Nucleotides)

GGACAAATT CCAATTATG TAAATGTAAA AGAAAAGACA ACAAATAA GCTAGAAAGA TGAAAGCTAA AAATCTATT
 TGAATATGT AAGATGATGA CAGATATTAA ACAGTAATTA GTATGAAAC AATCAITTA ATGCTTTTNC CAGGGGAACT
 GCAGAAGTTG AGACCCTCAA AGAGCATGCA AGCTAGTAGG GAGGCTGCGA CTCATACCTT TGAATCTTTC TGTTCTGCAA
 ATTCTCAACT CTTACCAATT TAACTCTGCA GTACTGCTAT GGAAATTACA TAAGAGTAAA TTGG

SEQ ID NO:1239: (Length of Sequence = 389 Nucleotides)

TGTTATAACT GGCACTTTAA TTGTMTTTTG GAACTAGAAT TTAGGGGCAG TTGGATGAAA TTGCAAAATT AGAAGGGGAA
 TAAGAATTTT CTAGTGCTAT ATAAAGAAAT GATGATGGAG ACAAAGCCT TGCTTTCTC TTTTTAGAAT TTATTTCGA
 TTTINAGCAT ACTGTGGGGC TTTTAGAGCT AATATGATCT AAATNCAGAA AATTTAATTT TCATAGTAGG CCAGGTGTGA
 ATTACTATG TTGCTATAG AATGCTTATT TAGACTAACA ATAAATTTAC TTGCTTTCT AAGGCCAGTC AGCGAATGTG
 GGGATGAGGC AGGATGTTTT AAATGAGCCA GAGATGATCC NCAAGGGGAA CAGTCGACAC AGAGGTCTT

SEQ ID NO:1240: (Length of Sequence = 365 Nucleotides)

CTCCAGCCTG GGCAGACAGAG CAAGACTCG TCTCAAAAA AAAAGCCTTC CTTGCCAGGT GAAAGCAAGA GTGGTATGGA
 ACATTATTTT AAACATAAGA AGCAGAAGGT TCTCCTCTT GCAAGTATGT TTTCTTAAA TGTAGCATTT CCACTGGAGG
 AGGTGGTCTG GGTGGATGGT TAATATGTGA GGATTGTNCA GCCAGGCAGA TAACCAGGCC TCTGCATATA CAGATACCCA
 CAGCCCAGGA ATCTTGAGAA CTGAATGGCC CATAACAACC TCTGGCACTA TCGGAGCTGC AGGGAGGCTT GGCTGGGGCT
 ACTCCAGTCT CAGGCCCTCT TTTTTCAGCG GAAGTCACAA GGAGG

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CTGATAAGGA GGTAAATTICA TAGGAGCTGC TAAGATGGGC ATGAGGNTCA AACTGCAAAG CACCAACCAC CCCAACAACC
 TGCTGAAGGA ACTCAACAAG TGCCGGCTCT CAGAGACCAT GTGCGACGTC ACCATTGTGG TGGGGAGCCG CTCCTTCCCG
 GCCCACAAGG CTGTGCTGGC CTGTGCAGCT GGCTACTTCC AGAACCTCTT CCTGAATACT GGGCTTGATG CTGCCAGGAC
 CTATGTGGTG GACTTCATCA CCCTGCCAA CTTTINAGAAG GTTCTGAGCT TTGTCTACAC TTCAGAACTC TTCACAGACC
 TGATCAATGT TGGGGTCATC TAGAGGTAG CTGAGCGTCT GGGTAT

SEQ ID NO:1230: (Length of Sequence = 343 Nucleotides)

AGTGGAGAGA AGCCCTATGA ATGTTTTGAG TGTGGGAAAT CGTTTTGCTG GAGCACAAC CTCATTGAC ATGCCATTAT
 CCACACTGGA GAGAAGCCCT ATAAATGTAG TGAATGTGGA AAGGCCTTCA GTCCAGCTC GTCCCTCACT CAGCATCAAA
 GGATGCATAC TGGGAAAAAT CCCATCAGTG TAACAGATGT GGAAGACCT TTTACAAGTG GACAAACCTC AGTTACCTT
 CGAGAACTIN TTTTAGGGAA GGACTTTTTG AATGTAACCA CTGAGGCAA TATTTTCCA GAGGNAACAT CTTCCTCTGC
 ATCTGATCAA CCATACCAA GAG

SEQ ID NO:1231: (Length of Sequence = 406 Nucleotides)

CTCTGCGCGG GCAGCTTGA GAAGGOGCAA TACTCTCCAG CTCCACCGTT ACTTCAGCAT GGCTGGGGAG GCCTTGGAAA
 ACTTATAATC ATGGTGAAG AGGAAGCAA CATGTCCTTC TTCATGAC GGCAGGAAG AGAAGTGCTG AGCAAAGGGA
 GGAAAGCCCC TTATAAAACC ATTAGATCTT GTGAGAACTC ACTATCATGA GAACAGCATG AAGGTAACCG CCCCATGATT
 AANTTACCTC CCATGGGCTC CCTCCGCAA GACGTGGAGA TTATGGAAAC TACAACCTCA GATGAGATT NGGTGGGGAC
 ATAGGCAAAC CATATCAATG TACATGTGTC TTTATGGTAG AATGATTAT ATTACTTTAG GTATATAGCC AGTATGGGA
 ATTGCT

SEQ ID NO:1232: (Length of Sequence = 380 Nucleotides)

AGACCATCAA AGGCCAGAG GAGAGACTCT TGGGACAAAT AAATATTTAA AAGCAGTTGC CTATGAGAAA ATGGAAAAAG
 CCACAAGCAA AGGTAAGATC CATGCTCCAA AAAGGCCTGA GAAATCTTA AACCTTCTCC TCAGATTGAT CCCAAAGCTT
 AGAAGCAATA CCAAGATAAT AGCAAAAATC CTCCCTGGAA AAGAGTCAGT CTGCAAAAAC CGGAAAAGGA GGTGTGTTTT
 TCCACAATGC CTAATTTCTA ACAACAACAA CAAAACTCA GAAAACATGG CCAATAAGT GGAAGAAAAT AAAGTGACGG
 AAACCTTCCC CGGAGGAAAC ATAAGCTTCA GGCAAACTAG ACAGATTTTA GACTGTCTAA

SEQ ID NO:1233: (Length of Sequence = 357 Nucleotides)

TTCAAAGTTT ATCACAACCA CCACCATCAA GACAGCAAAC CAAAGGGGCA TGGTAAAAGA AAGTTCAGT GACTCTGGAT
 TTGGTTCTAA TTTTAATGCA ACTTCTTGAT TGAGTGCAAG GTCAGCACTA CTTCGAAGTG GCTTTGGCGT TTCANCGGTG
 GGTAATGGAG ACATTGCCAA ATTTATATTC TGTAATTTIN CGTTGGGTGA GGGGAGCATT ACATCATTAT ATAATGGTAC
 TTCCTCAAGT TGCTGGTCAT CAGTTTCTGT GTGTTGCTG CCAAATCTA AAGATATGAT TGINTCTCCA GCGGCTGGGG
 CCAGCAAAGT TAAAGCATCA GGTTCCTTCT TAAGTTT

SEQ ID NO:1234: (Length of Sequence = 313 Nucleotides)

CCAAGAAATC TTAATINCIT TATGTGTTGA CTTTTGACT CAACAATTTT TTTAAACTT TTTGTTTTTT NCTGAAACGT
 TCTGTGTGTT ATGAGCCTTT TGTTTGTINC TCGTTAAATG CACTCGACCC AAAATGGTT TGGCATATCG AAAAGGAGAC
 CAAGGAGGGA GGGGCTGGGG CGTGGGAGGT GGGGAGGAGG CCGAATGGA CAGAAAGTTG AGGATAAGAG AAGAGGAACA
 TAGAGACAGC CAGAAAGACA TGGGGAAGA GTGTTGGAGA CAGAGAAAGG GGAAGGCAAG GGAAGCCAA AAG

SEQ ID NO:1235: (Length of Sequence = 386 Nucleotides)

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SEQ ID NO:1223: (Length of Sequence = 370 Nucleotides)

ATAAGCATAT GANITTTATCT ATAGGCCAAG TTAATGACAT AACTACAAG AAATGACTTG TTTCACATGT TTAAACCAG
 TGTTTTGGCT ATACTAACTT AGTGAGACAT ATTCTAAAGA AAAATAGAGA CGCAAAGAAG ATCTTACACT TTAATAGTCA
 ATTTTGTAGT TGTAAATATTA CTATCGATCA TTTTGTAACT CTCCTATATA GGGTGTAGGA TGGTGGAAAT AAGTAATTTT
 NITAAATGTTG TTAGGAACCA AGGCTATCAG TGTAATAATGA AGGAGTTACA AGCATAAGAT TGAAGACGG TAAGTAAAAA
 GCTCATTAGT ATAGTTCCAA GTTTAACTTG TCAGGGATGA GCTCATGATT

SEQ ID NO:1224: (Length of Sequence = 188 Nucleotides)

ACATGACCNA GGCCTGACCA AATCAGACTA AATCCTANTA CCTATACCAG AGTTATTGAG AAAGATAAGN TTGGCCTGC
 NGGCCTTTGA CAGTGAAAGG NNTAGGCTT TGGAGCTCCT CAGGGCCACT GCTTCAGGA ACCTTGCTGA CAGTGAAGCC
 AACACAGATG AAAGCAAGGC CAAACATT

SEQ ID NO:1225: (Length of Sequence = 353 Nucleotides)

CCCCAGCCAA GGGAGGCAGT NAGINAGTGT GGTACCCAGC GTGGGAAACC GTGCTTTTIN CCATGGNACT NTGCAACCCA
 CGGATTAGAA GATCCCACTC AGGAACCCAC GNCAGTGNA CCTAGAATGC CAACCCCAAG GCTGCACAGA TTCTAAACAA
 CCTCTCANCT GGAATCTGCC TAACCCTGCA GAGCTCCTGC GGGGAGGGGT GACCACTGCC ACANCTGCTG CTGCTGCTG
 CCTAAGCCAT TTAA

254

CAAAAAGTTA GAAAAACATG TAAACGTAAG TNATGAGGTA TTTCATAGAT ACAGTGCCCA TACAAATNCT CTTTCCACA
 ATTTTCAACT GCCAGATCTC TTGCTTTAGT CTTTTINOCT TATATTGGA GAAACAGAAG AGTTTGACAT AAAAGTCCCT
 TTGAGGATGT GAGGGTTGCA GTAGTTTACA GCAGGGTCAG AAAATGAAAG TAATAAGCA ATATTACAT GTTTTGTAT
 AAGACCAAAA ATATTTCCTT AAAAAAGTTGT TAAAGTTT TTAGTCTAT AAACACTCAC TTTTATAGG CACATGATTG
 TCTGTGTGAC TTCTCTTCC AGAGGAGGAC TTT

SEQ ID NO:1227: (Length of Sequence = 352 Nucleotides)

GGCATCTGTT TTTTGTGTTG TTTTGAGATA GAGTCTCACT CTGTCGCCAG GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA
 CTGCAATCTT TGCTCCCGG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC AAGTAGCTGG GAGGTGTGCA CGCCACCACA
 CCCCAGTAAT TTTNGTATTT TTTGTAGAGA TGGGGTTTCA CCATATTGGC AAGGATGGTC TCAATTTCTT GCGCTGTGA
 ATCCGCCCGC CTCAGCCTCC CCAAGTGTG GGAATCCAGG CGTGACCAG GCGCCCGGCC GGNATCTGTA GATTTTAAAA
 GGCCCCAGTG GTTCINATGC ACACCCCCAG AG

SEQ ID NO:1228: (Length of Sequence = 387 Nucleotides)

AGTTTTTCAA GATTGAGTGA CACTATTGTA ATGAGAATCT TCACTGGAGC ATCAGAAGAA CTGATTTCAA GCCAGTTTG
 TTGGTCAGCA CGGTCAAAAC TTCAGAAGAA TCTTGTGCTC TGAGGCTTTC CAAAGCTTTG TTCCCAGGG CAGTAACAGC
 TTCCAGTGTG GGCAGAGTCT TTAGTATTAT CACCAGGGCA GCTGCACGTG GGCTGTAGC CATCTTTCTC TTTTAGTACG
 ATCCCACCTG TCAGACTTCT TGAATTTGCA CTTCAAATTA GAGCCACAAT CAAATTATCA GTACGNTGT TTATTTTGT
 CACCAGAGAA AGGACAGAGT CTGTTTCAGC AGAGTTTGA GCCAGGTACT GATCTCTCTT CAGCAGG

SEQ ID NO:1229: (Length of Sequence = 366 Nucleotides)

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GGAAGCTCAG TTGCAGCTGA CCGTATTAAAG GGTCCCTCTCC CATGTGTCTG TGCCCGCTCG TTAGCGTAGG ATTCTNIGCCC
CACGGCCCTT CCGTTTTTCT AAGGGCTTGG CTTT

SEQ ID NO:1217: (Length of Sequence = 272 Nucleotides)

CTTCCCAGCT TTTCCTTGT GTAAACAGCT GGCAGTGGT ACATCTATAT TTGTTAAGAG GCAGAGCACT GTATTTTGTG
TAAGATAAGG TGCTAGTCTT GGCCAGGCTG CCAAGCTGGG GCNTTTTAAA ATAAAAGTTT TAAAGAAAAA TTATAGCATA
ATAAATTACA CAATTTTATT GGAAACTGA AGGTGTTCAA CCAATGCTAG TTTTAAATA TATTAGAAA TACTATTTCA
GGAAATTTTA ACTACACTCA TTAGTCTTAT GG

SEQ ID NO:1218: (Length of Sequence = 281 Nucleotides)

GTGCCCCAGG CTGCAGTGCA CTTGTGCAAA CGCGGCTCAC TGCGCCCCA ATCTCCCACT CTTAAGCAAT CCTCCACCT
CAGCCTCTG AATAGCTGGG ATTACAGGTG TGCAGTCCA CACCCAGCTA ATTCTTTAA TTTGTTTTAT TTTTAGTAGA
GATGGAGTTT CGCTATGTTG TAAAGGCTGG TCTGGAAGTG CTGGCCTCAA GCGATCCTCC CGCCTTGGCC TCTCAAAGTG
CTGGGGTTAC AGAGGTGAGC CACCATGCCT GGGCCTGCTC A

SEQ ID NO:1219: (Length of Sequence = 231 Nucleotides)

GTCTTCTCTC CTTCTTCCC TTTATGGCA CTGCCCGAA CCAGGCAGCC AGCAGGGGAT GGGATCAGGA TGCAGTTGTC
ATGGAAACGG TTGGGGATCC ACAGGAACGA CATTACATA GGGACATTN TGAAAGCAAA GCAAGAATGA NTGCTTTCCC
GATCTCAGAC TGGCTGGATT CAGATCATTG TTTGGGCTGG TTCTCATTTT AAGGGGTAAG CAGTTTGCTA T

SEQ ID NO:1220: (Length of Sequence = 409 Nucleotides)

AGTCACCTCAG AAACCTACTT TGCTTACAGC CTCATTATG TTTTGTGTAT TTGTTAAGAT ATTCCGTGTG ATGACATATT
TTGCCCTTAAA TTINCTAATT TTCCTGGCCA TTGCTTTCT GTGATTGAA AATGTTACGG TAAGTGCTTA GTTGGGAAC
TATACTGTCA ACATATATTG CATTACTTCA GCAGAGCTGT AGTTCATAA CATAATAAAA TGATGCTTTT TTTAATAAGA
AGATCATACA CATTTCATTA TGCCCTAAAA GATGAACATT CAAAGTTTAC TTTTCTCTG TTTTGATATG ACGGATATAT
ATCAGTAAAA TAAAAAATGC TGCAGNACCA ATATGCACTA ACTCAAACAT GCTGTGGATT TGTAGGGGCA CTGAGGTAGC
AATGTCAAG

SEQ ID NO:1221: (Length of Sequence = 396 Nucleotides)

ATCTGAGATA CTTTGTCTC ATGAATAAAT TAGTTAGTAG AATCTAATTT CTAGATCCTT CATAATGGTA ATGAGGGTA
AAAAATAATA ATGTAGTAGT CAATTTTAGC CCTTTAAACC TATGGGGAAC TGTATGAATA ACTGTTTGAA ACTGCAGGT
AATCCTGTCA CACTTGCAA CACATAGAAG CAACAAGACT ATTCTCTC ACACTTTTAA TTAAAATAGT GCCTGAGTAG
ACTTCCAGGG TAAGGTTCAG AAATTINCIT TCTAATTTCC CTGTTTAAAT GACCACTACT TTTAAAGCTA TGCTGGGAAT
TCACTTTTCA ATATATCTAA CTTACAGGAA ATTTTGAAG AGCCTAAATG TCTATGGGTA GATTCAATGT TTCCTT

SEQ ID NO:1222: (Length of Sequence = 350 Nucleotides)

GTATTTNTT CTGGGTACTC TTCATGGCCT GCTAGAGAAC TTTACTAAAT TATAGTCCAG TAGCTGGACA GAGCTGCATG
TGTATTGTCT AAGTCCACCT GTGCTGCTGG TCAAGATTAT TTTGCAGTGT TTGGTGGTGT TGAAGAGGAA TACTGTTGTG
AAGGCTGAGT CAAGTGCATG ACAATNCTCA TGGCTCACTG GCTGATGAGT TGTGGCATGA CTAGAAAGCT CTGCTGTAT
TCCCAGATGA CAAGTCACAC CTGAACAGCT GGATACTACT CGCATCCAAT TTGCTTCCA GTTAACATAT TTNCAGAAAA
TATTGGATT TGGAGTACAT ACAAATATT

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GAGAAGATAG TAGAGAAAGT CAGCGTTACA CAAAGGAGAA CCAGGAGAGC TGCCCTCTTT GCCGAGCTA CCACCTCCCC
TACTCCAGA ACTACAAGAG GTCGTAGGAA GAGTGTAGAG CCACCTAAGC GTAAGAAGCG GGCCACAAAG GAGCCCAAAG
CACCAGTCCA GAAAGCTAAG TGTGAAGAGA AAGAGACTCT GACCTGTGAG AAGTGCCCCA GGGTATTTAA CACTCGCTGG
TACCTGGAGA AGCACATGAA CGTTACTCAT AGGCGCATGC AGATTTGTGA TAAATGTGGC AAGAAGTTTT TCCTGGGAAG
TGAGCTGTCC CTTACCAGC AACAGACT

SEQ ID NO:1211: (Length of Sequence = 344 Nucleotides)

TTTTTTTTT TTTTTTCAGG GAAGAGCTTT ATTGCTTCCA TGGGGGTGGC CTGGGAGGC TGCCACAGCT TGGGTAAGCT
CCTTGGGCTT CANTTCCCTT TGGTCCAGGC TAAAGGCAGA ACCCAACCAC CTGGCAGTNT TGTGTCTGAA ACCTAGAACA
TGTGGCAAGT TGGTGAGTCC GGGCCTGCGG TAGTCCTATG GNTCAGCTGC AGCTGTGGAG GGGAGCTCTT CCCAGCAGGC
GGANTGGGCG TCACCCTCCT GAGCTTTAAA GTTCTTTCTG CTATAGCCCT GGGGCGGTCT TGTGTGGCTCC GAAGGAATGG
GCTCCAGGCT TCCCCATGG GACA

SEQ ID NO:1212: (Length of Sequence = 364 Nucleotides)

AAAGAAAACC TGGTATTTTC ACCATCCTCT CTGAAAATAA ATACTTTGAC TTGCACTGAT TACTACTTCA TCAGCATTCA
ACTCCGCTCC GTGGCACTCT GTGTGAATAA TTTTAAAGGC AGATTAAGCA TTCTAAAAAT AAATCTAAT GGTAAATTAG
GATATCAGAT GCTTCCATTA TAAAAGCCTA TCCTATTCTG TACTCTCAGC TGGCAGTCAT ATCCAGATCT CAAGCTACTC
TGGCTCTTAT TGAACAAGAA CCTATTCAG GNGTGAGGT TTTGAAGAGG GGATCTCTCA TGGTTAACTA GAGNCAGGAA
GAGGCAGAAT TGCCACATA CTCTNGCAGG AGTTAAATAA CAAT

SEQ ID NO:1213: (Length of Sequence = 302 Nucleotides)

CTAATTTTG TATTTTGTAGT AGAGACGGAG TTCTACCATG TTGGCCAGGC TAGTTTCAA CTCTGACCT CGGATGATCC
ACCCGCTCG GCCTCCCAA GTGTGGGAT TATAGGCATG AGCCACTGTG CCGGTACT TTTCTTTT TTAACACT
GAAATGCTG TATCTACCAC ATTAACATT TATTTAAAAA AATTGTGTAA ATAGCATATG TATGTAAATT TAATATTAAT
ATACCTCTT TTTGTCTT CTTAGGTGG TTGGAGCCTA GGGATACTTA CTTACTGATT TT

SEQ ID NO:1214: (Length of Sequence = 317 Nucleotides)

CTAATTTTNC AGACAGGTTT ACATGTAAAA GGCTAGGTAT TTAGCCACCT CAGCAITGAT TAGTTTGA TGTCTAAGCT
CTGTACACA TGGCTTCCA TGGCTTCACT CTACAAAACA TATTINCAAC GTGAAGNTA CATCTACAAG AAATCTACAT
TTCAAGGGTT TTACAAATCA ATCTGTATC TTTCCCTGA ATTGACTCT ACAGACCCG TCCCTGTIN ATTNCTTTG
CCAGCTTAA CGTCCAAAG TCTACTTAA TGCAGCTCA AATGTTAAG ATTGGGCAAC AGATTACAG TTCCTGT

SEQ ID NO:1215: (Length of Sequence = 276 Nucleotides)

ATAAGGTATT AAACAATAT TCTGTACTT GANTTAAAAA AAAATCAAGC TGGGTGCAAT TGCTCATGGC TGTAATCCCA
ACACTTTGCT AGGGTTAAGT GAGAGGTTCA GCCCAGAAGT TCAGTACCAG CCTGGGCAAT ATAGTGAGAC CCCTTCTCTA
CAAAAAAAT GAAGAAATTA GCTGGGTATG GTTGATGATG CTGTGNGCC AGCTCCTCGG GAGGCTGAGG CTGGAGGNTC
ACTTGGGCC AGAAGGTCAA GGCTACAGTG AACCTT

SEQ ID NO:1216: (Length of Sequence = 354 Nucleotides)

GCATAGGCAG CCCTGCTCT TGCAATTACC TCCACGTGA ACTAGCTGCT CAGTCATTGC TCTGGAATAT GGAGTTGTGA
TCTAGAAATT AAAGATGGGA TTAGGTAACC AGTGAGGTCC CTTCTACTGC CAGGTATGA CTCTCTCTT TGTAAATGTC
ATATGTAGGG TCTGTACAC AGGACATTTT CTTCAATGTA GTTCTCAGA TGCAATTGAGC TCTCTGAAT GACTTAGCGG

303

SEQ ID NO:1204: (Length of Sequence = 346 Nucleotides)

CTCTTTAGAA AGCCTGCCTT GGCTGGGCTT GGTGGCTCAC CTCTAATCCC AGCACTTTGG GAGGCAAGG TGGGAGGATT
 GCTTGAGCCC AGGAATTINA GACTAGCTGG GGCAGTGTAG TGAGACTTTG TCTCTACCAG AAAAACCAGG CGTGGTGGCG
 CATGCTGTGA GTCCAGCTA CTGGGAAGC TGAGGCAGGA GGGTTTGCTT GAGCCCGGGA CGTGGAGGTG GCAGTAAGCT
 GTAATTGTGC CACTGTACTC CAGNCTGGGT GATAGAGTGA GACCTGTAT CAAAACAAA CAAAAACAA AAACCTGCCT
 TCTNGGGAAT GGGCTTCTGG GTTTTT

SEQ ID NO:1205: (Length of Sequence = 292 Nucleotides)

TACAACGAGA CACTTGAGCA CACGCTACA CCCAGACATC TTGGGGCTGC TATTGGATTG ACTTTGAAGG TTCTGTGTGG
 GTGCGCGTGG CTGCATGTTT GANTCAGGTG GAGAAGCACT TCAACGCTGG ACGAAGTAAA GATTATTGTT GTTATTTTTT
 TTTTCTCTC TCTCTCTCTC TTAAGAAAGG AAAATATCCC AAGGACTAAT CTGATCGGGT CTTCCTTCAT CAGGAACGAA
 TGCAGGAATT TGGGAAGTGA GCTGTGCAAG TCCTGAAGAA GGAGATTGTG TT

SEQ ID NO:1206: (Length of Sequence = 336 Nucleotides)

TTGCCAACAC AGTGTGTCAT GTTATTGGG CTATTACAG GTAAGCTTAA AATACAATGA AAAGAAAAGA CCAGACGTCA
 TCAGGAATGT CGAAGAACAA AATATTTAGC ATTTCTTAGT TTCAAATGTT ACCATTTCAT TGCAGCTGAG GAATATAGGC
 CATTOGTTGA CATAACTGCA ATGGGTGAGA CTTATTTTTA GCCACAGGAA GCAAATACAT TTAACCAATG ACTTTTAGGA
 CAGGAAGCAA AAAAGAAAAC AATATTTTCA TGTAGCAAGG ACAAGANAAT CATTTATACA AATTAAAGTG GATATTAAAA
 TACCATTATA AAGAGG

SEQ ID NO:1207: (Length of Sequence = 319 Nucleotides)

TGCCICANCC TCCAGAGTAA CTGGGATTAC AGGCGCCGCG CGCCACGCCT GGCTAATTTT TGTATTTTTA GTAGAGATGG
 GATTTTINCCA TGTGGGCCAG GCTGGTCTCC AACTCTTGAT CTCAGGTGAT CCACCTGCCA CAGCCTCCCA AAGTGTCTGGG
 ATTACAGGCA TGAGCCACTG CGCTGCTC CATTTCCCTT TTATAATTCA TCCCTGAAGT CCGTTAAGGT AGAGAAGCTG
 TTTGATCGTC CCAGCCCTG GGAGGCTGAA AGGTAAGTIN ACCAGCTCCA TGCTGAGTT TAGCACCTGC TGTGCCAGG

SEQ ID NO:1208: (Length of Sequence = 357 Nucleotides)

GAGATGTTTA AAAATGAAGT GGAAGTTTTT TGTTTTTGTT TTGTTTTTGC AGAAAAAGA TTTTAAATGG CTTGAATGIN
 CTGCCATAGT TGCGTCAGAT TGTAGAAAA TTATGTGTGA CATCTGAGAG AGAAAAGAAG AGCCTTTTGA GGAGCTGCGC
 TAAATTTATT TTTGTGTTAG TCTCTTAACT CTTGGCTTG AATGAGTCAT TGACTTTCTT TGCCAAGATA GGGTTAGCAT
 TTGTTTTGTG TTTTAAAGC AGGCCAAGGG ATTGCCACGA GGGGAGACAA CCTGAGCAAC TGAAGGAAGG AATTCTTAGA
 AATTGTGTTT ACCAGTTGTT TTAGTCTGAA TGTGATT

SEQ ID NO:1209: (Length of Sequence = 362 Nucleotides)

CCCATCTGCT CCACCCAAAG AAATCAGACA AAGTAAATTT TATTGAGACA GACAGAAATG CACCTACTCA GGACTACAGT
 TAAGCATTTA CTATTAACCA AAGAGTTGTG TTCACATTCC AGATAAGTCT ACGTGGAAAA GCATTGAGAA TTTACTAGGT
 TTTTNCIACA TCACATTTTC ATCTACAATA GGGACAACAA ACTGACACTC AGGATTTGAT GGGCTCTCAT TACAATGCTA
 TACATTTAAC AGGNCNAAAC ATCAGTGACT TTGAGGAAAA AGTTATAAAA NGACCAAAAC CACCCACTGT AGGATGGGCT
 CTGGATGTT ACTGTACAGC GTGGGTCAAG GTAACAAGGA GG

SEQ ID NO:1210: (Length of Sequence = 349 Nucleotides)

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TANTTTAATC ATTACTCAGA AAAGGCAGTA AAAGATACTA TCTATAGCAG GCATCAATAA ATATGANCCA TGAGCCAAAT
CAGGCTTACC ACCTGATTTT NTAGGATAAA GTTCATTGNA AACACAGTTA CAGTGTCTTT CCA

SEQ ID NO:1198: (Length of Sequence = 318 Nucleotides)

CTCAATTTCCT TCTCATCTTT TINATGCTAT TATTGTCATA TAAGTTACAT TCCTATACAT TGTGTGTCCA ACACAAATTT
AAAAATTATGC CATTGTCTCT TAAGTCATAG AACAAAAGAG ATACAAACAA AACATACATT TATCCTGTCT TTTATATTTG
CCTATGCAGT TACCTTTACC AGTGTTCCTT ATTTCTNCAT GTGGATCTGA GTTACTGTCT TTNAACITCA ATCTAAAGNN
CTTTCAGTCT GAAAGACTGT AATTTNAATT TCINGTAGGG GTAGGITAAC TAATGATTAA TTCTCAGTAT TCTGAGGA

SEQ ID NO:1199: (Length of Sequence = 326 Nucleotides)

TCTAGTTATT CTGAGAACTA CAACCAAGAA AAGAGGGAAG CACCGGGTTG GCCAAGGCCA TCCGGAGACT TGTCTGTCTG
GGTCATTTAA AAAGCTTTTC TAGGATAACG TTGGCTTTCC AAGTGGTTTT CCAAGCTGAT GTCTTTCCCA CTGAGGAGAA
GCTGTAGGCC TGTGGACTGC CAGGTAGGAG GAGGTTGAGG TTTAGAGGAA AGAGGAGAGC AGGAATGGGT TGTITNCAGT
GGGGCTGTTT CCATGGACTC ACCAAGAAGA AATCGAGGTG CTGATGGGGC TGCACAAGTG CTTATCAGAA ACAGCTGTAA
CAAGTT

SEQ ID NO:1200: (Length of Sequence = 341 Nucleotides)

GGGTGACAGA GTGAGACTCA GTCTCGCTGA AAAAAACAAC AACATTGCTT TACAGTGTGA TTCCAGTTAC AGAGAATATT
CACATAGGTG CATAAATAAA TGAAAAAATT ATTGGTTAAT GTCTCTGTAT GTTGGGATTC TCAGTGATTT TMTTTINCTA
CTTTTNAATT TINATAATTC CTCCAGTGTG TTGGTGTTAG CTTTATAGAT TATATCAAGT AACCTTTTGC TGCACCAAAA
AACCCCCCAA ATCTAGTGA TTAACAACAA ACCATCTTAC AATTTTNNIC AGAACTGTCT AAGGCTGGAT ATTTTACTGG
GCTCTCTCCT GAATGTGGGG G

SEQ ID NO:1201: (Length of Sequence = 312 Nucleotides)

GTCTTTNTTA CCTGCTAGC AATAGCTCTC AGTTTCAGAG GCACAGTCTT TGGAGACCAT TCAGCACTGA GAAAGCAATA
TTTAGAACCT ATTGCAAAAC TGGGCCTGAG TTAGGCATGG TGATGAATGC ATCAGCAAGG AATAGAAAGT NCTTATCGTG
AAACCTTCA ACCTCAACTA TGCCTTCATA GACACACACG TTCATGCACA TGTAGGCACA TGTACCATCT CACATCTTTT
ACTTTCCCGA GATGCCATAT ACAATTACCT ACATTAATAN CTGTAGCACT ATACCTTTTT GAGCCCGAGA GA

SEQ ID NO:1202: (Length of Sequence = 344 Nucleotides)

GGAAAATAGC CAGACTGGGT ATTATGCATG TAACAAATGA GGACATTGTG CATAAGAAAG GAAACATTAG TTTTCTGTCA
TCCTGGGCCA AGTACCTCAT TACAGTAAAT GTGTGCTTTT GGAAACTCTT TGCTTGTTNCT GATGGCGGTA AGCATGGGGT
CCCAGGCAGG TTCAAAGGCT GAACTGTAAG AAATGGGCAA GACAATACAT TTGTTTTGG AAGGAATTTT TCATGGGATA
AGTTTCCCAA AGCTTGAATT ACAGGCTATG AAATAAAGCA AATAGATGGA GGAGAAAACA AGTATTGTTT TCAAAAAGGT
ACCAAGTCAA TTCTATTAA AGGA

SEQ ID NO:1203: (Length of Sequence = 370 Nucleotides)

GTCTTTATC TTCTCCTCT TATGTGCACT ATGTAATGTC CTCATCATTT TAAAAGTGAG TTGCTATTGG GCGGGCGGG
TGGCTCAGC CTGTAATCCC AGAACTTTGG GAGGCCAAGG TTGGTGGCTC ACTTGAGGTC AGGAGTTCAA GACCAGCCTG
GTCAACATGG TGAAACCCAG TCTCTACAAA AAACACACAC AAAAAATTAG CTAGGCATGG TGGCACACAC CTGTAATCCC
AGCTACTCGG GAGGCTGAGG CACGAGAATT GCTTGAACCC AGGGAGGCGG AGGGTTNCAG TGAGCCCAAG ATCGTGCCAC
TGCACCTCAA GCTTTGGGGT GACCAGAANC GAGACTTTCT CAAAACAAAA

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TCAAGCGNTA ACAATCTACA TTGNTATTT NCTTGGCCAC TGCATTCTTC AAATGANTAA TAAATTTCCA GAATTCOCAT
TCCCATGGTG TTTTTCCTAA TAGANCTTTT TCACACTCGA TGTTG

SEQ ID NO:1191: (Length of Sequence = 303 Nucleotides)

CCCGGAGAGC TGCCTTCCTC TTCTACCAAG TGAGGACACT GCAGGAAGAC AGCTGTCTAA GAACTAGGAA GTGGGCCCTC
ACCAGACATT GAATCTGCGC TCCTTGAAC TGGACTTCCC AGCATCCAGA ACTGTGAGAA ATAAATTCAT GTTATTTATA
AACCAACCTG TCTATGGTAT TMTTGTAGC AGCCTGCAGC TCTCTATCAC TCTGTITTAT AAGAGGCTGA AGTTTACTTT
ACCTCAGGCA GAGCTAAGCA AAAAAGATTA CATCCCGATT ACAAGATGAA AGTAAACAGA ATT

SEQ ID NO:1192: (Length of Sequence = 315 Nucleotides)

ACTCCAGCCT GGGGAACAAA CAAGCAAGAC TCCATCTCTA AATAAAAAAG AGTGTCCCC TAAGATGCTC TGCGAAATAT
TGTAGACTGG TGCTCTCTTT GGATGATGTT TGCGTCAGC ATTACCAAAA TAAACTTGCT CTCTGGGAAA AAAAAAAAAA
TAATAAATAA AATAAACAGT AAGAAACACC CATAAANCAA ATTTCTATGC TCCTGCAGCC TCTTTTGGCC TGAGCAAGTG
GGACCTGGT ATACACATCA CCTGTCCTT CCCTTTTCTT TGAAATGTTG TGTGTCTGT TAAATTGGGA TTGAA

SEQ ID NO:1193: (Length of Sequence = 313 Nucleotides)

CGAATTAGTG AACTGTGCTT CAGGTTACAG AACCTGGTCT TAGCTCCTTG CCTGCTGAGA TTTTGAGTAA CAAGTAGAAT
TCTCCAAAAG CAAAACAGT AAAAGTCATT TTNCCACTCT TTTGGTCAAG CACATGTAAG CTTTCAGGAC CAGGTGGTAT
GCCGTNCTG AAGTGAGAC ACATGCCCCA GGGAAAGGGT AATTTTAAAA TTCTTCCCAT AGGTCTCAT CCTGTCTCT
TGCTATGTC AGCATCTTN AGTCCAGCT GCAGGGCTA TATTTAAATA CCTCATGCT TTATGCTTT TGT

SEQ ID NO:1194: (Length of Sequence = 341 Nucleotides)

GATTTAAAAG CAAGTNATTT TNAATCCAC GAAAGATGCC TACCTTGGT CCTNCTCTGG TCCTTATTAG CCACACCTCT
CTTGACAGGC AGAGGAGTTA GGAGTGAGG GATATTCCTA CCAAGACCCT ACAAATTGCA CTCTTAGGCC ATGCCCTGGG
TACCCAACT CTAGAATTCC CTCTCAAAG GGACCTAAC CCAACTTCAG AGCCTATATA GGCCAAITCC TTGGTCCATT
TTCCAAGGGG TGGNCAAAG ACAACCATTT TNGGGAGGNG GANGGGAGTA GGATGAAGCT TTGGNCACGT GGGTCTTGGG
CAATCCAC ATATCCCGA A

SEQ ID NO:1195: (Length of Sequence = 239 Nucleotides)

TTATTGATTC TTTTFTTGAA ATGGAGTCTC GCTCTGNNC CCAGGCTGGA TTGCAATINC NOGATCTCAA CCCACTGCAA
CCTCCGCCTC CGGGGTGGA GCGATTCTC TGCCCTANCC TCCTGAGTAG CTGGGACTAC AGGTGCGGC CACCATGCCC
AACTAATTTT GGTATTTTGA GAGACAGGT TTCTCCATGT TGGTCAGGCT GTTCTCAAGC TCCCAACCTC AGGTGATCA

SEQ ID NO:1196: (Length of Sequence = 291 Nucleotides)

CCATGCTTGG CTCAGGGCCT GGGGCGGGT CCTGGGTAGA GTCTAGCCC CAGAGCCCCA GCGGCTCATG TCCTGCGGCC
CCTCACTGAC CAGACGATGA TCGNAACCT CTTGAGAAAA CATGGCAAAG GATTAGAAAA GGGCAGGGTG AAATINCCAA
GCCACTCAGA CGGAACCCAG ATGATCTTCA ATGCAGCCAA GGAGCTGGGT CAGCTGTCCA AACTCAAGGT TCACATGGTA
CGAGAAGAAG CCAAGAGCTT NACCCCAAAG CAGTGCCTGG TTGTTTGAAT T

SEQ ID NO:1197: (Length of Sequence = 303 Nucleotides)

CTTCATATTT TTATAGCTGG GTCAAAATA TGCAATTTAA AAATAAATAT ATCCATTINC CTATTCTTAC ATTTATGAAT
ATAAANTAA AATCTAAGAA ACATAATGCT GCCAACTAAT AGTAGTGGAG GAAAGGAAGC TGAGAGAAAG ATAAATATAT

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SEQ ID NO:1185: (Length of Sequence = 383 Nucleotides)

GAGAGGTGAG CAGGCGTGG GGGGGGGGAC TTCTGCAGAG AAAATATTTT TAAAGTCATA AAACCATGAA AATAACAAC
 ACTGTACGTT TTATTTTATA GAAATCAAGT AGTATCTAAT AGACAAGGGA AGACATTGAT CCATAAAGTT TTTAAAGAAA
 ATTTGGTAAT CTCTTAAAGT ATTTGTATGG CTTTGAATGG GTGTCCTTTT CTAACCTTGT TTTAATTTT ATGATACACT
 TATAATTGTT TCAAATAGGC ATTTGTNCAT TTTAAACTA CTAGAAGTTA CACTGAAGAA AAGCATTCAA AAGAAGACTT
 TTGGACAAA AAAATTGTTG AATGAGTGAA ATGCTGAGG TAGCTCAATT TACCAAACAG GAA

SEQ ID NO:1186: (Length of Sequence = 373 Nucleotides)

GGGGCTCAAG GTGTGCATGT NTGAGGGAAG AGAGAGAGAG AGAAGGCCGC CTCANAGGTG ACTTTCAGCC TGCNAGCCTT
 CTTCGGGG CGCCATAAAC GCCCCAATT TCCCAGCTGC TAAAGGAAGA GGAAGGTACC TGTCGTGCA CGCAGACGGG
 AAGGGCTGGG GAAGCGGGAG GACTGAGAAA AGCCAGATCT TAGCAAAGCA ATGTCTCAAG ATGGTGCTTC TCAGTTCCAA
 GAAGTCATTC GGCAAGAGCT AGAATTATCT NTGAAGAAGG AACTAGAAAA AATACTCACC ACAGCATCAT CACATGAATT
 TTGAGCAGAN CAAAAGGGC CTGGGTGGAT TTCGGAAGCT ATTTCATAGA TTT

SEQ ID NO:1187: (Length of Sequence = 365 Nucleotides)

TCCACGCAAT TCTGAATAAA GTTTATTAAA TAATATGTAC AGCAAATGTA GTAATTCAAC ACATCTATTT ATCAAATCAA
 TCCACTGCAA TGAAGAAAA TAAATGANCA GAAAAATCTA TGCTGCATA GGCATGCTC TCAGTGTGTA ATTTAAATGG
 CAATACTTTA AATTAAATGG TTATATATAA TGTCAGTTAT TTCTCTTCA GAATATAACC TTTTGTAG TAACCTATTC
 TAGCAATAGG GCTTAATACG NCTGCAGATA AATAGNCTG CAAAAACCAA AAACCAAAA TAATGAAATT NAAAAGGGGA
 AAAAACTGT AACTGNGNTC AGAGTTACCT TTCCTCCCC ATAGG

SEQ ID NO:1188: (Length of Sequence = 350 Nucleotides)

ACTATGGCT TACATTTATT TTAAATTTCA CTAAATACAA ATCTTGATTG TCATGCCAGT TTAGATCTT ATTAATTINC
 AGAATGGATA AATTCAAATA ATCATAAATT ACGGTAACTT TTTATTATAC CAAGGTGTTT TAATGCCATC ATATGANGAC
 AGATGCTTCA AACAACTGC ATTAAATTAT ATTTTNAATA AAATTAAAT CTATTTTAA CCTATTTGTA GTCACAAACC
 GAAAACGIGT CGNCTTTACC TTAGAGCTAA AGGCTTACTT TATGCATACG GGATATTTAA TAGTCTACAA ATCAAAGGTT
 TAAACAGNCC CTAAAAAATT CCATATATTC

SEQ ID NO:1189: (Length of Sequence = 393 Nucleotides)

GCAAACTTNC TCACTTCCTC AAAGAAGAGT AGTGCACTAA AAAGAAGGTT GCACCGGAG AGCATGTAAA GTGTCTCAAG
 GGGGACATCT GAAGTNCCTC GTTCCAGGG AGCCCACTGG CTCCTCACAA GTAATCTAAT GAAAGCTATG CATTCTCTCT
 GGGCTCCTCA TATGAAAAAN CCAATGTAT GANGCAAAGC CTAGAAAGGA TTCAATACTG GAGAAATGCA CACAGCTACC
 GATAAAGACA GCTCAAAAGT CTAAGGCTG CTGACATGAA CCAGATAATT GGTGGCTACA GTTGTGCCTG CTAAGATTG
 GGTGCATGGG GCTTCGCTTT GGTAGCTCC CATGGTCTTC TTTTCCAAA AAAAAAAG AAGNCTTCAG GTT

SEQ ID NO:1190: (Length of Sequence = 365 Nucleotides)

AGTGTAACA TTCACATATT TAATAGTACC TTAAAATAA GCATTACTAC ATTTAAATG GTTCCAAAT GAATCTATAA
 ATGGTAATAT AAATTAAAA ATACGAAGTT AAAGTGAATA AATTTTAAAC CTTAGCTATG GTATAAATAA TGGTAAATGT
 ATAGTGTACC TGTAGTCAT TAAATGTCT TAAAAGATAA CAGCTTGTTA CCAGAACATT AGANACCATA GCCATGATTC

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TCATGATGCA GTAAGTACAA ATCTTTTTTG AAAGAGATAT TGCTTGINAA CATTTTGGAT TTATAACATT GGCTTATAAT
ATATACAACA TCTTTATAAA TGCCACCTCA GTTGGGTTTT AAGCCTTACA AGAGTGCTAT GAGTAAATAT CACCCACTTT
AAAA

SEQ ID NO:1179: (Length of Sequence = 297 Nucleotides)

CCTTGGGAAT TGTTCCTTGG AATTAAAGC ATGTGTCTCA CACAAACAGT AGAAGGCATT GAGCATTAT TAGTCTTTCC
TCAAGAAGAT ATCAAATGA GACTAGAAAC TCTCTGGTGA ACACAGAATG CTCGAGGGG GNCCAAGGTA CATTATGACC
TTAAACGAA CTCCTCTCC ACTGGCCCTA TTAICTACTG TGGAAAGCAC CATGCCAGGC ACAGCAAGAG ACTTAAGAAC
ACCTACAAAG GAAGATCTCT NCCATCCACT TGTGTAATTA TCTTTAAAAA GTAATCC

SEQ ID NO:1180: (Length of Sequence = 278 Nucleotides)

GCTGCTTGGG ACTTGAAATC TGTTGGCOGAA GACNGTCAC TACATAACTT CAAAAATAAT CAACCCACCT CCCTTCCCAA
ACCACCCAAA TTCCTCATC CAGCGTTTAC TTTTTTGAAT CCACTCAGAA CTTTTTNCCTG CGACCCCCCT CCCTAAATGG
AGTTGGGTGG GGGGAAATG AATACTGAGT TGGCCTTTAT TTTTAAAAAG ACTTTTGTAT CCAATGAGGC CCCCTAAATA
ATTGAGTTTT GGGTCTGGT TGGTTTGT TATTTGT

SEQ ID NO:1181: (Length of Sequence = 331 Nucleotides)

AATTGAGTTA CAGGAGAATA CTGTGAACAA TTGTACASCT AAAAGTAATA ATCTAAATTA AATGTACACA TTCCTAGAAA
CACACAAATC ACAAANCTG ACTCAAGGAG AAATAGAATA TCTCAACAGA CCTATAACAA CTAAAGATAT GGAATCAGTA
ACCAAAGCC TTCCAACAAA GAAAGCCCN GGANTAGATG ATCTTCACTG ATGNTTCTA CCAAACATTT AAGAAAGATT
TAACACTAAT TCTACTCAA CTCTCCACA AAAAATATGA GAGAGTAGA GAAACCTTC TAAATATCT TATGAGGGCA
GCATTACCGT G

SEQ ID NO:1182: (Length of Sequence = 345 Nucleotides)

GTGIGINTAG AGGGATGGAC AGGATGCTGT TTATTNCCC TTTCTTGGA ATGGACCTTC TGTCCCTTCC ATTTGGACAC
CACAGTGGAA GCTGGTGGCC TGAAGGAAG GATTAGGTCA TGGACATTG AACAGGTGCC TTGGGCATGA TGTATAGATG
CAGTCATATA TACCTTGCTG GGTGGGGTG CCACCTCCAG TGGNCAGCTC CAGATCCAAG GAGCAGCCCC CTGGGGATGG
ACCCCATTC AATCATGTA CTCCAACAG TTTTINATG TGAAGAAGA AACTTINGCA TTATAGAGAC ATCATCAAA
AACAGTANAA ACAAATCAA CCTG

SEQ ID NO:1183: (Length of Sequence = 272 Nucleotides)

ATGGAAGATT CAGAGATCAA AGGTGAAGTC CTCTATCTCG GCTACTACCA ATCAGCCTTC GACTGGNATG ATGAAACANC
CAAGGCCTCC AAGCAGCATC GTCTTAAACG CTACCACAGC CAGACCTATG GCAATGGGTC CAAGTGGGAC CTTAATGGGA
GGCCCCGGGA GGCGAGGTT CGGTCTCTCT GTACGAGGG TGCAGGTATC TGTGGGGACT ACATCGATCG CTGGACGAG
CCCTTNTCT GCTCTTATGT GCTGACCAT CG

SEQ ID NO:1184: (Length of Sequence = 335 Nucleotides)

ACATTTTGCA AACTCAGTTG ACTCACCTCA NATTTGCCAT TCCAATTACA GGGCCTCGAA AGAGTCAGCA CTCAGCCTTG
CTCAAGGNTC AGATTTAGGG GTTGCCCCC GNCCCCGCAA CCTCCCACT ATGTGTTCAA ATGTCTCAA GACAATCACC
ACTGTATTAA GAGAAAGAGG CATGGGGGCA GAGCAACAAG GAAATAAATG AGGCTTGAGA ACTGTGTCTA GGTGGGGTTA
CTTTGAACCT TAAACCACCC TTGGGNCCCA AATCTGCATG AGCAGGGGGT GGGCTATCAT GCTACAGANC CCCAAGGAGG
ACATTTTTC CAACA

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GGTTTCTCTG TAGCTACACC AGCTGTTTCAG AAAGCTCATT GGACCTGGTT TTGAAAATAA AACAAAGTTA AAACCCTGGG
 AGGAGTTATT GTNCAGTGTG GAGTACTCAG GCTTTCTTAT AAAGAAAAAA AAAGGTTATC TGGTACCAAA GTGTGCACCT
 ACAGACCCTC AGGTACTGCC CTGTGACTTC NCTGTATGAC ATCACAAGGC TGCCAAGTGC TGCTTINCTA GACTAGGGAG
 TTGGTGAGGT TTTGCTAG

SEQ ID NO:1173: (Length of Sequence = 274 Nucleotides)

GAGATCTAAA TGAAATTTAT AAGAAAATTG TGGGTTCTGC CCAAGATGAC ATCTAAATTG AAGAAGGTAC ACAGTGAGTT
 TAAAGGATCA ACGAGAGAAA CTTTTATTAT TCATTTGCAC AAGAAGACAC ATTCAGTATC TGGATTATCC AATATATGGA
 ATACTTTGAG TTGAAATGAT TAAAGGGTAA TCTTTAATCA TTAATTAACA AATCATTAAT TAANCAAAT AATATTTAGC
 AAATTAAGCA AGTINCTAAAG GCTACATGCA AACT

SEQ ID NO:1174: (Length of Sequence = 326 Nucleotides)

AGAAATTAAA ACACTTTAAT ATAAACATTT CCAGAATATA GACTGACCTT ATATCAGTAC TTTTNGAGAC CGTTTTAAAA
 CTATATATCA TCTAAGTTTA TTATAGACTG TTTTATTTTC CACTTTCAGA ACTAGAAAAT GCAAAAATAC ACTGCAAATT
 AGATTTAACA AAGAAAAAAT CAGTTTAAGN TATTTTCATAC ATATTCCCTG GNGAAAGCTG AGACACATAA ACACAGNAAA
 ACAACAATAA AATACCACCA AACTAACAC AAAACCAAGG AAAGAACTGN TTTTGTAAAG CTGTGTAATT CTGTCTTTTA
 AAATAA

SEQ ID NO:1175: (Length of Sequence = 426 Nucleotides)

GCAGTCAGGA TGGACACATT AGAAAGAAAC ATTTTAGTTT CAATGTTACC ATAAAACCAG AACGAAAAGC AGCATGCTGT
 ATTATATTIN NCAATTTAGG TTCCATTTCT AACTCCACCT AAAATGAATA TGAACAACT CATTTTAAAG TGTGTGTCAG
 TCAATACAA TAATAGTCTA AGTTTATTCA CATATGTACC AACCAAAGCC CAATAAGCT AAAAGGAAGC CAAGTGTAAT
 AAAAAGGCAG CTATAAGGTC TTGTGTTTGA NTTTTTACCC AGCAAGAAAT AAATGATACT TAGTAATCCA TCTTTCCCCC
 CCACGTCCAT CCCTGCACAC ATCTAAAATA GGCTAACTTC ACCTATTCTA ACTTCTGAAA TTGTTTGGG APTCCGTGT
 TACTTTCTCA GAGTGGATGG TATAGC

SEQ ID NO:1176: (Length of Sequence = 301 Nucleotides)

CTAATCCTCA ATCCTATCCC TTINCCCTTT AGCCATCCTC TCTAATTINT TTAACCTAAG CCTGTGTGTC CTCAGAAAAT
 AGGTTATGCT GTTGGTGTGT GTGGTGGTA ATCTATATAC ATGGNGTTAT GCTATTGATT TTGTTTGGTA ATCTCCCTTT
 TTAATCAATA CTATATTAT AAGANCCNIT TAAGTGGTTG TATGCCTCTA CTTTATTGCT TCTGACTGCT GCATGGAATT
 CCATATCAT GTCCACCACA CTACTCATT CTCCCTCTTG ATGGACGCTG AAGTTGCTTG G

SEQ ID NO:1177: (Length of Sequence = 331 Nucleotides)

GCAATTCTCC TGCCTCANCT TCCTGAGTAG CTGGGATTAC AGGTGCCTGC ACCACGCCCG CCTAATTTTT GTATTTTATG
 TAAAGACAGG GTTTCACCAT GTTGGTCAGG CTGGTCTCGA ACTGCTGACC TCATGATCCG CCGGCTCAG CCTCCCAAAG
 TGTGGGATT ACAGGCATGA GCCACCAAGC CCGGCAATC CATGCTTTTA AACATTACTC TGTATGGTGT GATAATGAAC
 AGTCACTGNT ATCTGACTGT TCATCTGTGT GGTCCATCTG TATTGAATAA AGGAGGAAGG AGTTGAAGAA TAAAGGGGAA
 AATCTTGCA G A

SEQ ID NO:1178: (Length of Sequence = 325 Nucleotides)

GAAATNTTG GAGAGAATAG TCATACCTAC TTTAAAGAG AATAAATTGC CTTTCCTAAA TNCCTCTGCT TCGCTCCTTT
 CCTGGCGTTG CTCTGGAACC TTGTGAGTTA TATGTATGAT TNCGTACTC TGATATCCAT CAAAGTGCAT AACATAGTAC

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GTTGTGCATA CATTCCAAAG AATAAAATGC TAGCTACTAG GTTTTGAGAA GCAGAATAAA ATATGATACT GA

SEQ ID NO:1167: (Length of Sequence = 305 Nucleotides)

AGGAAAAGGA TTGATCACAG GAGAGGTACC AAGGGAGTTC CCAGAATAAT AGAAAAGAGG NTCCTCAAGA AGACAGTCAC
GCAAGAGACC AAGAGAAGAG CTAATCCAAT TGATGCAGGA GGAAGTAGAG CTTCAGAAAG AATGTCTCAA AAAAGAAAAA
AAAAGAAAGG AGTGGGTAA GTATCTGATG ANTTTNCCTAA ATTGAGAGGA GTTACATAGC TCTATTGAAA ATCTTAGATA
AANNIGATTG ATAAATACAT AGANCATAAA GCAAACACTG AAATAAGGCA ATTATCAACT CCAGG

SEQ ID NO:1168: (Length of Sequence = 342 Nucleotides)

AAGGTTTTAG TGATGATTCA GTGAGAAACA TATTTGAAGC AACAAGCACA GTAACCTGGAA GCTGTAGGTA CTCAATAAGT
GTCAGTTTCC TTCTCTTCT AAAAGCTGIG CTTTCAAGTC AATTGTATGT CTAGAGTCGC ACTGTCTGGT ACASTGGCCA
GTACTAGCCA CATATGGCTC TCAAGTACTT TAAAGAGGGC TAGTCTGAAT TGATATGTTT CATACATGTA AAATACTTTA
AAGAGGGCTC ATCTGAATTG ATATATGCCA TGCATGTAAA ATACAAATCA GATTTCTAAA ACTTTGTACC AAAAAATACC
ATAAAATAAC TTACTAATAA TT

SEQ ID NO:1169: (Length of Sequence = 397 Nucleotides)

GAGACGGAGC TCCNTCTGTC GCCAGGCTGG AGTGCAGTGG CACGATCTTG GTTCACTGCA AGCTTCACCT CCCAGGTTCA
CACCATCTTC CTGCCCTCAGC CTCCCGAGTA GCTGGGACCA CAGGCGCCCA CCACCACGCC CAGCTAATTT TTTATATTTT
TAGTAGAGAC GGGGGTTTCA CCGTGTAGC CAGGATGGTC TCGATTTCTT GACCTCGTGA TCCGCGCGCN TTGGTGTCCC
AAAGTCTGCG GATTACAGGC GTGAGCACCA ATGCCAGCC TTTGAGACA CTTTGTATTG CCACAATCA GGGTAGGGAG
GGCTGGGAAA TATTACTGGT GTGTAGTGCA TCGAGGCCAG GGATGCTGCT AGACATCCTG CAATGCACAA GGACAGG

SEQ ID NO:1170: (Length of Sequence = 422 Nucleotides)

GTTTTAAAGC CTCTGGACAG AGCAGTATTT CGTTTAAAC TTGTTTTTC TTAAAAGCTT ACAGTGTGTTG GCTAATTCTC
CTCCCCTTT TACAAGACGG GGGCCGAGG GTGGACACTG GTGGCAGGTT AAGGGTACT GTCACTTTAA GAAGCCTGCA
GATTGAAGTG TAAACATGGA GAAATTAGG GCTGATTTTT TAACTGTGT GAGATATTAA CCAGCGGCC TGTATATAAA
TCAGGAAATC CAAACAGCGA TTTACACCGA TTAACACCCC CTTTATATAT TTTTACAAA AATACACTGA GAAAAATATC
AAACGTTTTT ATCTCTCTG TCTTTTTTTG TTTTTTAAA GTGTCAAAG TCTACATNTA AATATAAAN ATTAAAAGTT
AAACTCTAGC CCTTCAGTGA GG

SEQ ID NO:1171: (Length of Sequence = 384 Nucleotides)

TCTGAATGGG TTGGTGAAAG GTTACAGGAG CAGACAGCCT CCACACCCAG GCTGCTCTTG GCTATACAGG CTACCTCCAT
CCCTGANTGT TGTAATAGGA AAGTCTAAAC ACACAGAAGA GGAGCACAAA ACCAATAATT ATCACACATT CAAAATAAAA
CTAATCCATA AAGAAAAGTA CCAAACTCAA CAAAGACAGC AATGCCTGAA AACACTGGGC TGTATCAGCA AATAGAACAA
AGAAAAATAN GCATAATTAA AACAGTAGAA GGTAAGGAT AATTTTTTAA ANTTAGATAT CATATTCTGA TTATTGAAAT
AAAAAACTTA GTAGAAAAGC TTAAGTGAAG AGGATCAAAC CTGAGGAGGA CCCCAGCT TTTG

SEQ ID NO:1172: (Length of Sequence = 418 Nucleotides)

GAGAGAAAAA AAAAAATCT TTTAAAAGCT GCCATCTGAG GTGATGGCTT CTCTGTACTT ACGCCATACC CCAGANTACA
ATAAATAAGC AATTAGAAAA CGTTCAAGTA TGAAGGGATT TCCTCCTCCC CGCCAAAAGC ACTGCTCTCT GAAGGAAGCT

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SEQ ID NO:1160: (Length of Sequence = 215 Nucleotides)

GTAACAAAT CAATTAACAT GATTATCCA GACCTTCTT TTCTACTGG AAAAAAGAGG GCATTAACT GGATGATGAC
 AATAACACCA TAACTACAAG CTTTATATAA AGTCCTTTAT ATACAGTGTT AATACAGTGA AAGNTCAACC TTATTGAAAG
 AGGCTGGCT TCTGCCCTCA GCTACTGGGA AACATCACT AGGCCTCTGG CATGT

SEQ ID NO:1161: (Length of Sequence = 298 Nucleotides)

AATCTTTAA ACTACTTTGA ATCTTATAGA AACATCAGAA TCTTTTGAAT TCAAAAGAAG CCAGGGACTC TAGCCAAAGT
 GGAGTGGTTT TTTAACTCAA GGATTTAGGA CCTTGGCTGA ATACAAACAT TGAATGATTA CTCAGTAGGT GCCAAAGCTC
 AGGACTTTAG ACAGAGTCAG AGTCCAGTTT GTNCTGAAAC ACAATTTGAT TTCAACTATT GTTTTAAGTG AGAGAGGAAA
 GTGACATTAT TATGAGTGTA AATTINCTGC TTTTAAAGTA GAAGTTACTG ACAATIGA

SEQ ID NO:1162: (Length of Sequence = 163 Nucleotides)

GAAATAAGAA ACAGCTTGTA TATAACTAAT GCTTTGAGGG AGAAATTCAA ATGGCTATGA AAAAATATTT ATAATTCAAT
 GATAATAAAA ATCTTACACG TTAAACTTGA AGAATGTAGT TAAAGCAATA CTTGGNCATA ANCTTAGCAC ATATTAGTAA
 AGA

SEQ ID NO:1163: (Length of Sequence = 393 Nucleotides)

GCCAAACCCA GGAGCATTTT ATTCAGATGT TAAATGAACC AGTTCAAGAA GCTGGTGGTC AAGGAGGAGG AGGTGGAGGT
 GGCAGTGGAG GAATTCGAGA AGCTGGAAGT GGTCAATGA NCTACATTCA AGTAACACCT CAGGAAAAAG AAGCTATAGA
 AAGGTTAAG GCATTAGGAT TTCTGAAGG ACTTGTGATA CAAGGTATT TTGCTTGTA GAAGAATGAG AATTGGCTG
 CCAATTTNCT TCTACAGCAG AACTTTGATG AAGATTGAAA GGGACTTTT TATATCTCAC ACTTCACACC AGTGCATTAC
 ACTAACTTGT TCACGTGATT GTCTGGGATG ACTTGGGCTC ATATCCACAA TACTTGGTAT AAGGTAGTAG ATT

SEQ ID NO:1164: (Length of Sequence = 260 Nucleotides)

TGCATTCTTG CCTCTTGAC AAGTCTGCT TCTTTACAAA GGACTTGA AGTNCCTCAC CCAGACCATC TCACCTGTAC
 CGAAATAACC TCCCCTACTA GCGAATGAGC AACTTTGGAG CAGAAAGCAG AAAGTGCATC ATATTTCTCT TACTATGCAA
 ACTGGTAGCT CAAACCTCAT ATGACCTCAA AAACTATAA TTGCTTCAAC CTAAAAAGC TGATTGTAAA AAAAAAAAAA
 NGCTGTGGTT GCACACAGT

SEQ ID NO:1165: (Length of Sequence = 330 Nucleotides)

CATTGGTATT TAAAAATGAA TATTAATATA ATGAAATGNN TTGCCCTTT TGTAGGCATA ATAAGCCAAA TACTTTTTTA
 CCCAAAATAA TTTTINAGAGA AAATGATGTA ATGAAAAATT GTACCATGAA TTAGGAGCAT AGTTTTTNC ATTAAACGT
 CACCATTAAT TAAAGATGA TTGATTATTG CTATACCAA TCAGATGAAC TCTGTTTATC ACTTTCCINC TCTGTCCCA
 AACAAATTGG TTCAATCAGA CTGAAATGTT TGTGCTTCA ACTTATTAGA ATGGAAGATA ATGCAGATAT TTCTGTGGGA
 AATAAAATAA

SEQ ID NO:1166: (Length of Sequence = 312 Nucleotides)

ATTGGAGATG CCTTTGTCAA ATTTNCCCAT TTTAAATGGC CAGGAAAAAC AATAATTATT TTCCTGATGC TGAGGTTTTA
 TATCTTAGTA GAAGAACTTA AACTATGACT TGTATTCAAG TCTAACAGGA ATAGAGGTAA TGANTGAAAG TAGTCATTGA
 CCTGGGACAA GATCACTTTG AACATGACAC TATTATACAA AGTGTAAATAT TTATTTTTTA ACAACCACTT TTCAAAGCA

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CAACCTCCTC TTCAGTGTCA AAAAAGCCAC GGTTAGACCA GATTCTGCC GCCAACCTTG ATGCAGATGA CCTCTAACA
GATGTAATGTT TTGTTTCCTC CTTTCATCTC TAATAATGA TTTACCATGT TTTTCTAAAA TACTTGTTAT GTCATTNCIT
TAAGAAGTGA CATATATTTA TGTFTAGTTA CTGTTATTC AATATAGCCC TGACCTCAGT GCTAAACTTT ATAGTTGATT
TTAAATCAA AAGTATTATT TTGTGGGACT TTAAG

SEQ ID NO:1154: (Length of Sequence = 203 Nucleotides)

CCTAAATCTT AAACCTTACA ACAGTTAAAT AAGACCCCTT TCAAAGGGAT TAACACACTG AATATTATAT ACATACAGAT
TTATATTTAT GCGCTATACA CATATATGNN CTTTATCTGT ATATAAATAT GTGATGATAA TGATAAAGG ATAATGATTA
CACGTAGGAT AAACATTTAT CAAAAATTGT ACTATAAATA ATA

SEQ ID NO:1155: (Length of Sequence = 343 Nucleotides)

GAAAACAAAA CACTAAGCTA TTTTGGACA ACTGTTCTAC ACAGAAGAGA GCTTCTCTTA ATTTAAAAA AAAAAAATC
CCAAATAGGC ATTTTTAGGC ATTAAACAAA AAAGAGAATC CAAATGAAAT ATTATACTTG ATGTTCAATT TTAATAGCAT
CTGATAAAG GTATGCTTCC TTTCAATTGA NTACATTTCT GNACATGTAT GTTATAAAT CCAGGNAACA GCCAAACCAC
AAGTTAATC TTAACAATGA ATATACATAG TTAACCCAT AGTAAGCAGC CCCTTTGAAA AGCACTGATG CACCCACAN
TTATATGGTT CCATTTTATA AGG

SEQ ID NO:1156: (Length of Sequence = 396 Nucleotides)

CCCACCAATT GCCATTAAAC CTCCCAATCT TTAAGTGGAG GNTCTCTACT TACTGTTTCA AGGCAAAAAG ATGATTAAAC
TATCTCACAT GGTGTAAAT TGGGCCTAAA ATAAATGACT CTAGTGGTAG CATTTTATGT AGGCAGGTCC AAGGAAGACA
GATTTGTAGA CAGAGTTGGG AAAAGGGTCA AAGAGCCAAT GAGTCTCCCT ATCCTGAGGG ATGCTTGAC GGAGCCACAG
CATGANTCA TGTFTTCTG AATCCATCTC AGTTTATGT ACAGGATGGA AATGCTTCT TTTTATGCA GTGTGCTTG
TAACGAGTTC CTTGCAGCTC AGGGAAGGGA GCAACATGTA CTGCTTGTG GCTTCTGTG TAGAGAAGGC AGGAAT

SEQ ID NO:1157: (Length of Sequence = 269 Nucleotides)

CAGGGTCTCA ATCGTCTCC CAGGCTGGAG TGCAATGGCA CAATCTCAGC TCACTGCAAC CTCCACCTCC CGGGTTCAAG
TGATCTCTCT GCTCAGCCT CCTAGTAGC TGGGACCACA GGCACTCGCC ACGGCAACCA GCCAATTTT GTATTTGTAG
TAGAGACAGG GCTTCACCAC GCTGGCCAGG CTGGTCTCAA ACTCTGACC TCAGGTGATC TGCTGCTC GGCTCCCAA
AGTGTGAGA TTCGGCGTG AGCCACTTG

SEQ ID NO:1158: (Length of Sequence = 190 Nucleotides)

CTTATTAGTT AATCCACGG CAGATTTTCA TTTCTATCGA ATATATTATA TGTAGAACT AGGGCCTTAA ATAATTAGC
TGACTTTNCC TATTAGTTAT TCCTTAAGAT AAAATTATGC TGGTGAAAT NACTGINGAA TTTCTCAAGA AATTAGCTC
TATAGAGGCA TAAGTAATCG AAAGACTTTT

SEQ ID NO:1159: (Length of Sequence = 340 Nucleotides)

GGGCACTGAC TTCTGGGAG TGTAGCNC TCACCTGGAC CCCACAGCCA GTGAGCATTA GTGCTTATAT TCCATCTCC
AAAGCTCTTT CTTCTACCA GACCACACAT GTGGCCCAAG GAGGGATATT TACTCTGCAC TTTTAGAGTT CTAGAAAACA
TTGTTAGTG GTCTGGCATC ATCTATATT ACTTGGCTTG ATTTGGGATA GAGTATAATC CTAGTCTCG ATGAAAGGAT
TTTATGAGT TAACCTTATG GGGTGATGGG ATTTATGGGA TTATTTCCAC CCTTAAATG ATTTTGTGGG GAAAAAAGT
GTACTAATCC CTAATTTAGG

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ATTTCAGTGG CCATTAAAGAC CCTGAAAGTT GGCTACACAG AAAAGCAGAG GAGAGACTTC CTGGGAGAAG CAAGCATTAT
 GGGACAGTTT GACCACCCCA ATATCAATCG ACTGGAAGGA GTTGTACCA AAAGTAAGCC AGTTATGATT GTNACAGAAT
 ACATGGAGAA TGGTTCCTTG GATAGTTTCC TACGTAAACA CGATGCCAG TTTACTGTCA TTCAGCTAGT GGGGATGCTT
 CGAGGGATAG CATCTGGCAT GAAGTACCTG TCAGACATGG GCTATGTTCA CCGAGACCTC GCTGCTCGGA ACATCTTGAT
 CAACAGTAAC TTGGTGTGTA AGGTTTCTAA TTTCCGACTT TCGGTGTCC TGGAGGATGA CCCAGAAGC

SEQ ID NO:1148: (Length of Sequence = 386 Nucleotides)

ATTAAATTGCT TGCCATCATG AGCAGAAGCA AGCGTGACAA CAATTTTAT AGTGTAGAGA TTGGAGATTC TACATTCACA
 GTCTGAAAC GNTATCAGAA TTTAAACCT ATAGGCTCAG GAGCTCAAGG AATAGTATGC GCAGTTNATG ATGCCATTCT
 TGAAAGAAAT GTTGCAATCA AGAAGCTAAG CCGACCATTT CAGAATCAGA CTCATGCCAA GCGGGCTTAC AGAGAGCTAG
 TTCTTATGAA ATGINTTAAT CACAAAATA TAATTGGCCT TTTGAATGTT TTCACACCAC AGAAATCCCT AGAAGANTTT
 CAAGATGTTT ACATAGTCAT GGAGCTCATG GATGCAAATC TTTGCCANGT GTTCAGATGG GGCTAG

SEQ ID NO:1149: (Length of Sequence = 364 Nucleotides)

GGCAACAGGG TGAGACTCCA CCTCAAAAAA TAAAAAATAA GAAAGATATT ATTCAAGAAA AGAACTTAGG AGCCAGGTGC
 AGTGGCTCAT GTCTATTATG CCACTACTTT GGCAGGCCAA GGCAGTAGGN TCACTTGAGG CCGGGAGTTC AGAGACCACT
 CTGGGAAACG TAGCAAGACC TCGTCTCTAC AAAAAAGTG TTTAACAAT TAGCTCAGTA TGGTGGCACA TGCTGTAGT
 CCCACCTACT CAGGAGGCAG AGGCAGAAGG ATGGCTCGAG CCTTGAATT CAAGGCTGCA GTGAACTAAG ATGGTGCCAT
 TGCACTCGNG GATGGGTGAC AGAGCAAGAC TCCATTGCCG CCG

SEQ ID NO:1150: (Length of Sequence = 267 Nucleotides)

GACAGGTGTA ATCTAAGCTT AAATAAACCC CCCGGAGGCT GCACAATTNC TTGGCATCTC TCCCCTGCCC TCTCCATCCG
 CATATTCAAT TTGGAGTTTG GAGAAGTATC TAGAATCINC TCCCACCCCA AAATGCCCAG CAGAGCCCCC CCGCGCCCC
 CGCACCCCTT GGAGCTGGG CTGTGTAAT CGTTGAGATG TCTGANACTG TCGGGGTCC CTACCTAGTG CTTCAACCAG
 ATCACCTCAC TTTTGAATTT CCTTCCT

SEQ ID NO:1151: (Length of Sequence = 386 Nucleotides)

GGAAGACGAA GGAGGAGTAA AGGCATGINT CACATGGCAG CAGGCAAGAG AGCGTGTGCA GGGGAAGTGC CCCTTATGAA
 ACCCTCAGAT CTGCTGAGAC TTATTCACIA CCATGAAAAC GGCACAGGA AAACCTGCCC CTAAGCTTCA GTTACCCCCG
 ACAGGTCCCT CACATGACAC ATGGGGACTA TGGGAGCTAT AATTCAAGAT GAGATTTGGG CAGGGACACA GCCAAACCAT
 ATCAGATACT TACCACATTA GACACTGACA GACAGCTCAC CACAGATTCT GGGCTCTATT CAAGGTGTG ACTTTGATCT
 TTTCCAGTT GTAAATGTTT CATCAAAAAA AACTGTGATT TTGGCATAAC TTTTTCAAG AGTTGC

SEQ ID NO:1152: (Length of Sequence = 239 Nucleotides)

GCAATCTTTT GAGTGACTTA CTTTGAGTCT TTGTCACTT TCCTTGATT TTTTACATG GTTTAACTCA GTGTACCCAA
 GAGTACTAGG TGCACTCAAT TCTGCTATTA ACTCTATAAG CAAGINCTTA AGAAAGTTAA TGTTAAAAA TAATCTTAAA
 ATTGCTTGA TAGGAAAAAT GTATTTGAAA TTAATAAAAA TTCTTATGTT GACTTCTTGG TTTTGAAACA ATGAATATA

SEQ ID NO:1153: (Length of Sequence = 275 Nucleotides)

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ATTTGTAGAT AGAGGATTCT CCTTTTGTCT AGTAAATACC ATTAACATAT TINCAGANGG CCTGGTCTAG GGTCATTTAT
TCCAGGGCCT CT

SEQ ID NO:1141: (Length of Sequence = 410 Nucleotides)

GTTAACCCTGT GCGCGCTCC GGGTATCOGG CGCCTGANGT TTTAGCTGCG GTGGGGGCGG CAGTCGGGAC CGACTNAAGA
TGTCATTTGT CAGAGTGAAC CGCTGTGGTC CCGANTTGG TGTAAGAAAG ACACCGAAAG TAAAGAAGAA GAAAACTTCA
GTGAAACAAG AATGGGATAA TACGTGACT GATCTAACC TTCAATGGGC AACTCCTGAA GATCTGGTAC GCGTCAITGA
AATACACAAA TCGAAGAATA GAGCATTAGT AACTGCGGAA CTCCAAGAAA AAGCTTTGAA GAGAAAATGG AGGAAGCAGA
AACCAGAAC TTTAAATCTT GAGAAAAGAA GATTNGTCTA TCATGAAGGA GGNITCTTTC TGATCAATAC CAGATGCAA
GATGTGTTGG

SEQ ID NO:1142: (Length of Sequence = 392 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTCCNGGG ATTGAATGTC TTTATTAAAT AAACGAGTAA ATGGTAGCAC AAATCACCAT
CAATATTTTT GGAAGGATTG GGGACAAGAT GTGAGTCAG AATATAATIN TCCATTTCAG GTCTCAATG TAGCTGAAGA
ACTGTGCCCA CTGATCAGTA TTACGTATTG CAAATGCAGG AGGTAAGGCT AAAATAGGAC TTATGCCGTT CAGAAGATTG
ANTTTGAAAC CTTAAAACT ATCATAATAG TAGGAATGCA TGTTAAGATT TGATAACTTT CTTTAGCTAG AGTTTTCAAC
CCACAGTAG GAGCAAAGTT GTAAAGTGAG TAGGINTGAA GAAGGGACAC TCTTTTGAGA AAAGAAATIN GC

SEQ ID NO:1143: (Length of Sequence = 200 Nucleotides)

ACTTCCCTC TCCTGGCATC TGCTATAAAA ATAAGAAGGA GCAAATATTC TTGCCTCTTT TTATCACCTG ANCTGAAAC
CCATTGTAAC TGCCATGAAA ATAAGCACTG GTCCATGAGA CCAATGCCA GAAATTCAG GCTAAGATTG CTGAAAGTG
GGCTGTGGGC ATTATTTAAA ACACACACAC AAAATTTACC

SEQ ID NO:1144: (Length of Sequence = 333 Nucleotides)

AACAGAAGCA TGTTATTTC TTCCATTCC CAGAAAGGGA GTTAATGAAG ATAAAAATTT ATTTTTTAAG GTCTTTATTG
AGAGAAACTT TGTTTTTCGA TATGAATAT TGCAATGTT TTTATAATA CTTTCATTAA AATGATGTA ACAGTAGTAC
CCAACACTGT AAATCAGTG AAAATAGTAA ATGATTCCTT TATTACTAAG ACTGTCATGC ATTCTGAAGC AGFTGGCTTT
TTTTTAACCA TAGGAAGTCA TTTCCCTCTA GTCCTTCCC TTCTACTCTC CTGCTCAGAC CATTAGTAGG TACTTTGTTA
AATAAAAAAC TAG

SEQ ID NO:1145: (Length of Sequence = 225 Nucleotides)

TGGGTTTCTG ATCCGAGAAA AATTGAAAGA CAAACATGGC TGGGGGAAGC AAAACGCTGA CACACAATTC AGGTGGCCCA
GCAGTGCTGA CCTGCAATCC ACCCCACCCC AAGGCAGCCC TTTCAATCCA AAGTGGACAG AGTGGGCCCTT ATCCAGANT
CACTCAGGAA GCTTCTTCAA ACATATGACT GCCACACCCG CCCCCAAGGT TCAGAAACAT CTTCG

SEQ ID NO:1146: (Length of Sequence = 223 Nucleotides)

AAGGNACAAT ATTATTCTAA ATAATTTAGA TTTGGAAGAC ATCAATGACT TTGGAGATGA TGGGTCTTG TATATTACTA
AGGTTACCAC AACTACGNT GGCAATTACA CCTGCTATGC AGATGGCTAT NAACAAGNCT ATCAGACTCA CATCTNCCAA
GTGAATGTCC CTCCAGTCAT CCGGGTGTAT CCAGAGAGTC AGGCTAGAGA GCCTGGGGTA ACT

SEQ ID NO:1147: (Length of Sequence = 389 Nucleotides)

SEQ ID NO:1135: (Length of Sequence = 402 Nucleotides)

GCAGAGGCTT AAAGAGTGCT TATTCACCTGA GGCTTGCCCT TNCCTACTCC TTCCTGGGAA CCCATTITGGC AACAAAGTGAA
GAAACCTAGG CCAGCCINCT TGAAGATGAG GGACCAACGG AGAGAGAGGC TCTGCTGTCC TAGCCCTCCC ACAGAATAAG
TAAGCCTAGC CAACACCACG TGGAGCAGAG ATGAACCATC TCAGTTGAGC CCAGCCCAA TTGCTGACCA AAAGAATTGG
GAACAAATAA ATAAITATTG TTTTAAGCTA CTGTGTTTCT GGGTGGTTTT GTATATAATA GTAGCTACCT GATACATTGG
GATGACCCCA ATTACTTGAA CTCTCTTAG GCTGTTTTA TCACGTGCAA ATAGGGGATA ATTTTAGTAA TTINGGGTTG
CT

SEQ ID NO:1136: (Length of Sequence = 381 Nucleotides)

CAGGTGCGAG CCACCACGCC CAACCCAGAA CTCITTTTAT TTTGCAAAAT TGAAATCTA CCCATTAAAT AGCAACTCTN
CTTTCCCTT CTCCCCAAG CCTTGGCAA CTGCTTTTCC ATTTCTATGA CAATCTCTAC TCTAGATACC TCATAGAGGG
TGAATCATAC AGTATTGTG CTTTATGAC TGGCTTATTT CACTTAGCTG CTATATTATT AATACCAGCT TTCTGGGGAT
ATAATTACA AACTGCAGAA TTGAATGGT TTNAGTCTAT TCACATCGGA TATGTTTTG AAGAGACAGT AAAACCAATC
CTTTTTCTCT TAGGTCTCA GACACACACA TGCTCTTTA TCTGGCAAGT CCGTTATAA A

SEQ ID NO:1137: (Length of Sequence = 325 Nucleotides)

TATTTTTGT ATAGACAGGG TCTGTATAG TTGCCCCGAC TGGTCTCGAA CCCCTAGTCT CAAGCCATCC CCCTGCCTTG
GCCTTCCATT CCTCTACTTT ATACCACGGT TATTCACCAA GCTTGCTTT GTTCAGTGA CTCTCTCATG GAAAAACTGA
GGTGATATTT ACCCTGGTTT TTCTACCACT GTGTAAGTGT CGCTAGTACC AGCTCAAAAA ATAAGAAATG AATAAATGAG
TGATGACTAT CACTATGTTG CTCAGGCTGG ACTTGAACCC CTGGGTCCA GTGATCTCC CGCCTCAGCC TTCCAAGTAG
CTGGG

SEQ ID NO:1138: (Length of Sequence = 422 Nucleotides)

CAACACACAT TAGCCTTAAC AACAAAGAGC TAATCTTATG TAAAGAACTC TTACAATTCA GAAAGAAAAA GATCCTAGTG
AAAATGTGGG CAAGAGATAG CAAAAACCA GCCATATGAT AATAATAGTC AATAAGTGAA TCTGAATGAT GTTATCINCT
TTTGTCATTT TAGAAATACA AATAAAAATG ATGATGAATG CNCTTGCTTA CTAAATTAGC AAAANCTGGG AAAAGATGAT
GATATTCAGG GTCAGATAAA GGGAAAAGGG TGCCCTTCTA TTGCAGTTTG GAAAGTAAAT TGGCACTGAC TTTTAGTGGG
GATAGTCTTG TAATATGGGT CAAANGTCTT CAAATCGTGT CCACATTTTG GGGCCTGCAA TTCCACTTCT AGGGATTAT
TCTAAGGAAG TACCTAAAAA AT

SEQ ID NO:1139: (Length of Sequence = 367 Nucleotides)

ATACCGAGAA GCATGCAAGC GGTTGGCTCCA CGTCCACAT CCATCCCCAA GCTGCTCCTG TTGTCTGCAG ACACGTTTTG
GATACACTCA TTCAATTGGC CAAGGTATTT CCCAGCCACT TCACACAGCA GCGGACCAA GAAACAAACT GTGAGAGTNA
TCGGGAAAGG GGCAATAAGG CTTGTAGCCC ATGCTCTCA CAGTCTCCA GCACTGGCAT TTGCACAGAC TTCTGGGACT
TATTGGTAAA ACTGGACAAC ATGANTGTNA GCGGAAAGG CAAAGAACTC CGTGAAGTC AGTGCCAGTG ANGCGCTGGC
GGTGAGGGGG TAAACCTTTT NCATACAGCC TTCGAGGCTT CTCCACT

SEQ ID NO:1140: (Length of Sequence = 412 Nucleotides)

ATCCAAAGGA TATAGGCAAG CATCAGATAC AGCCAAAGCA TTCTTTTCTT AAAAGAGTCT GAACGCATCT NATGCAACAC
CCAAAAGTAT CCTTTTNCCT CTGTTACAG TATGTTTGG CTTTGGAATA AATGATTAGT TATTGAACAA TATATGGAGA
AATATCTTAC AAAAGGAAGT CATTTCATT TTCTAACATC TTTTACATG CACTAATTAC ATGGTTTAAA TGAATATCCC
TAATCTTCAT CCAACTACAC CCCATGAATT TNAGGTTTAT TTAATCAACC TAGTTAGACC AGATATATCC TTCTAAAAATC

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CAGTGGTACA GCAGCAGCAG ACACGCATCG CAGAGCTGGA GAAGACGTCA GCTGAACACA AACACCAGCT GGCGGAGAGA
AGCAAGACAT CCANCTGCTA AAGGCATACA TGCATGCAAT CCGCAGTGTC AACCCCAACC TTCAGAACCT GGAGGAGACA
ATT

SEQ ID NO:1130: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTACTGT TCAAACAGCA ATGTTTAGIT GTACAACACA TAAAGTCTAG
CAACAATTAC AGGNCAGIT TGAGTGTCTG TTTGCTTGT TTCAATTGGG AAATTTAACT GTAATGTCAC CGTAAGATTG
GCTGGGACTG GTAACATTTA AGAAACGGGT TGTCNCTGCA TCCCCTAGGC GTGGGCTCT TGCTCCATCA GGACTTGGTT
GTAGATGAAT GGCCACAAG TCACCAGCCT TTGAGCAAGT TGTGTCCAGG TGGAGACAGG AAGAGGGTGG GCAAAGGGGA
ATTCTATAAA GACACAGTGT NTGGGGCAGT GGCAGTCAAC ATTCGCAAAC ATTCATGCAT CT

SEQ ID NO:1131: (Length of Sequence = 406 Nucleotides)

ATGCTAATTC AGGCTCCACA GATAGTCTG GTGATGGGGT TACATTTCCA TTAAACCAG AATCCTGGAA GCCTACTGAT
ACTGAAGGTA AGAAGCAGTA TGACAGGGAG TTTCTNCTGG ACTTCCAGIT CATGCCCTGCC TGTATACAAA AACCAGAGGG
CCTGCCTCCT ATCAGTATG TGGTTCCTGA CAAGATCAAC CAACCCAAAT TGCCAATGCG AACTCTGENT CCTCGAATTT
TGCCCTGAGG ACCAGACTTT ACACCAGCCT TTNCTGATTT TGGAGGCGAG ACACCTGGTG GAAGAGGGGT ACCTTTTTTG
AATGTTGGGT CACGAAGATC TCAACCTGNN CAAAGAAGAG AACCCAGAAA GATCATCACA GTTCTGTAAA AGAAGGTGTA
CACCTG

SEQ ID NO:1132: (Length of Sequence = 400 Nucleotides)

ATTTTGGTT ACTTCAGGCA GGAGGGTAGA CATAGCACTT ATCTGGATTG GATGTAGCCA CAGGATTAGA ATTGTTGGGT
CATAAAATAT GTACATGTTT AGCTTTAGTA GATCTTGCTT AGAGTTTAAA AAATTAAAAA TTAAATATT TTTTAAATTA
CAATAAATTC AGCTAATTTT AATTTTAGAT AATTTTATA ATGTAGTGA TCTTGGTTT AACCAGAGCA TGTCGCTGGA
TTTCTNCTCC CAATCGAACA CAGTAGAGAG AGAAGGTGGC GGGTCTCTAG TGATACCATG CACTTTTTTT TAGAACTTCA
GTGCTGTATC CCTTCATTTA CAATGTATGA TGAATAATAC TAAAGAAGGG ATNGTGGTGG TGGTGGGGA GGCAGGAGAG

SEQ ID NO:1133: (Length of Sequence = 347 Nucleotides)

CCCAGGGCGC GCCATCCATG GACGAGCTCA TCCAGCAGAG CCAGTGGAAC CTCCAGCAGC AGGAGCAGCA CTTGCTGGCG
CTCAGACAGG AGCAAGTGAC AGCGGCCGTG GCCCACGCGG TGGAGCAGCA GATGCAGAAG CTTCTGGAGG AGACCCAGCT
AGACATGAAC GATTTTAAACA ACCTCCTGCA GCCCATCATC GACACGTGCA CCAAGGACGC CATCTCGGCC GGGAGAAGCT
GGTGTTCAG CAATGCCAAG TCCCGCCGC ACTGTGAGCT GATGGCCGNN CACCTCCGGA ACOGCATCAC GGCTNATGGG
GGCACACTTC GAGCTGCGGC TGCACCT

SEQ ID NO:1134: (Length of Sequence = 389 Nucleotides)

GGTCCAGGCC TGCAAGACTT GCCTAGTGAG AAGATATAGG AATGGGAACC CAGGTAACAG TCTGSCACT TTNCCATAGG
GCTGCTGCAG TATGCCCAGG GCGCGCTCCA GTCTCTAGTA GCCTCANATT TTCCAGTACC TGGAGTATC ATCAGTGAAG
CCTGTGAAC AGCAAAGATG GCAGCCTACC GCTCCCTTTG GAAGCTTTGC CCTAGGGAGG TATGAATGAN CTINTTGCTG
GCCCAAACAC ACCTGTAGGA GTGGCTNGA GACCCAGTT TGGAGGTTTT GCCCAGTGAG GAGGAATGGC ATTGGGAAAG
TGCTTAAAAA AGCAGTCTGG GCCTCAFTTT TATAGAGCAG CTGTGCTAAT GCTGAGGGGT CCACAATCA

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SEQ ID NO:1122: (Length of Sequence = 181 Nucleotides)

CATCTTTTAA CATCAAAGTA CTACCAAGTA AAGAATTAA AAATTACTTG TCTAGTCATG ATATATTTTC CINCCTGCTGC
TGAAAAATCC CIGTCTTATT ATTCATGTA CCTTATCAT TCATTGATG AACTGACAG CAACTTGCTG AACAAGTTTA
AGAATAGCTG ATATTTACTG A

SEQ ID NO:1123: (Length of Sequence = 174 Nucleotides)

CCCTAGAGTT AAATTTACCC CATGAAACAT CAGCCACATG TCATATCAAT TCAAGTGTGT AACATTGATA TAATCGGGTA
CACCACAGCA GCACTGACAG AACAGAAAT GATTGAGAGA AAGCCAATTA AACAGCCAG GGGATAAAGC AGATCTGTAT
GACATTAGCT TTTT

SEQ ID NO:1124: (Length of Sequence = 232 Nucleotides)

CTTTTAGCAG AGACGGGGTT TCACCATGTT GGCCAGGATG GTCTCTTGAC CTCGTGATCC ACCCGCCTCG GCCTCTCCAA
GTGCTGAGAT TACAGGCATG AGCCACCGG CCTGGCCCGG GGAAGGCATT TTNAAGAAA TAATAGTTGA ATTGAGATCT
GATAAAGAA GTAGGAGCAA AATNGGGGGG GTGCAGTTTT CCAAGAAGAG AAGACAGTAC ATATAAAGGG CT

SEQ ID NO:1125: (Length of Sequence = 233 Nucleotides)

GATACTATGG GTTCAGTAC ATAGAGACAC AATTGAATTA GCAATGAGCT TCACTCAGGA GCCAGAGAAT GGGTTTNTNT
CTAAGAGATG TTTAAGTAA CATTTAAATG GCACTGCTGA TTGATACCAG CATCAGGAAG CTGAGGACAA GAGCTCTCTG
AGAAGGAAGT TGCCATATTA CAGAAGTGAG GTGACCAAGC ACTTNTTGTA GGTCTGTACA TTTAGACATT AAT

SEQ ID NO:1126: (Length of Sequence = 258 Nucleotides)

TTTTTTTTTT TCCTAGGGGC CGCAAGACGG CTAATTTATT ATAATTCTC GCGCGCAGTT GCGCTCTGGC GCCA...JYGC
AGAACGGAGC GCGCGGGATG CAGGAGGAGA GCCTGCAGGG CTCCTTGGGT AGAAGTGCAC TTCAGCAATA ATGGGAACGG
GGGCAGCGTT CCAGCCTCGG TTCTATTTA TAATGGAGAC ATGGAAAAA TACTGCTGGA CGCACAGCAT GAGTCTGGAC
GGATTAGCTC CAAGAGCTCT CACT

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GTGTGAATAG GCAAGCACTT TGTTGTGTG ACTAAGGAAC TCAAAATGAT AGGCTTTTIG TCACCATGTG CTTCCAGGNT
CTCTGTTGCA TGAGCAGAGA TAGAGGATCT TGCACAAACA ATTAAATGCT CTAGCCATAA GTAGTGCAAG TTTCCNTTGC
TTGAAATTTA CTGCTGATAG CCACTTGNC ACACCTTACT TCCAGAGGCT AGGAAGTACA GTTTTCCAC AGTCTAAGAA
TGAAAGAGNA TTAACCACAG TAATGCATAG CACTCATACC ATGGATGACT GGATAATTTT AAAAGAATGG GAATATGCAA
G

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ACAGCTCAAT GACTTATCAC AAAGCAAAGC CCCAAGAAGT CACCACCCAG CTCCAGAAAT AACACATTGA AAAGCTAGAA
AAATCTCAA TTGACATCCT AACACCACAA CTAAAGGNTC TAGAGAACCA AGAGTAAACA AACCACAAAG CTAGCAGAAG
ACAAGAAATA ACCAAGCTCA GAGCAGAACT GAAGGCAATA AAGACACAAA AAACCTTTAA AAATAGTCAA TGAATCCAGG
AGCTGTTTTT TTGAAAAA

SEQ ID NO:1129: (Length of Sequence = 163 Nucleotides)

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AAGCTTTCTC CAGATGGAGA AGAGACCATC ACTGCTGTGT TAGTTAGGCA GGAANGCAGA GGTGTTTCTT TTCTGGGGCT
AAAGNCTCTT TCTGACCACA CA

SEQ ID NO:1116: (Length of Sequence = 416 Nucleotides)

CACCTTTGGG AGGTAGGGAT CATAGTTCCA CTTCATTGAT GAGGAAACT GTAGTGCAGA GATGGCATAC ACTGTCCAAG
AACATGGTGG TGGATGGAAC CCAAAACCCA ACTTTTGCTC CCATGINCTC TGTCCACTGG CTATGGCTCT TGCCCCGTG
TACAGATACA GGCTCTGGAC AAGTTCACCA AATCCCTTAG GCTTCAGCCC CCTCATCTGC AGAATAGTGG CTTGGATTCC
ACCATCTTCA AGGTCCCTGC CAGCTTINAT TTATTAAAT TTGGATTAT TAAGCAGGAA AAAAAGTAAT GGGAGTTTGT
GGGTACCAAT GGATTAAAGG GGGTNAATC TGGNGGCTNG TGAGTAAAT TAGGGTCCCC AAATGG

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AAGGACCGGG ATTCTGATGA AGCOGTGTTT CTCACIGCCT GAAGTTTCCC TTTGGAGTTC CAAAGTAAAG GACACATAAG
CAACACTTCC AAAAACAAGG GAACAAGGTG GTTTATTGTA AAAACAGGAA ATGGTGCATG TCATTGAGAA CTATTTTAAT
GCAGCTATGA AAAGGGAAAA AAGTGCCAG TTCTTGATT CTTAGTACT GAAGAGGAG TAGCATTTC TTTATCAAT
ATAAGGAAA TTATTCACCA TTTTGAAGCT CACCTAGAC TAGGAAAT ATATCACTG CAGAGCAAT ACTTCTGTCA
TTACCTGAAG TGATCAGTAT CTATCTTCTT TGTATAGCA TGATCTCTC AAAAAGGCCT CCACTCCTTT CCTCACAATC
TGTGGTCATC ATGATT

SEQ ID NO:1118: (Length of Sequence = 379 Nucleotides)

GACAGCAGCG TGTCAGGGC GGCTGTGAG GTGTGCGGA AGCTGAAGGA CCTAACTGC CCTTCTCTG AGGGTCTGTA
TATCAGAG CCAAAGACAA TTCAGGAAGT GCTGTGCAG CCCTCAGAGT ACCGCTTGA GATCCTAGAG TGGATGTGTA
CCCGGCTCTG GCCCTCACTG CAGGACAGGT TCAGCTCACT GAAAGGGGTC CCAACAGAGG TGAAGATCCA AGAAATGACG
AAGCTGGGCC ACGAGCTGAT GCTGTGTGCG CCAGATGACC AGGAGCTCT CAAGGGCTGT GCCTGCGGCC CAGAAGCAAG
CTACACTTCA TGGACAGTT GCTGATACC ATCCGAGGC CTGACCATG GGTGCTCCA

SEQ ID NO:1119: (Length of Sequence = 233 Nucleotides)

CAATATTCAA GAGTCTTTAT TGAAGACTTG AGATGGGACT TCCAATCAG AGGATGTGGG AATCCAGCT CAAATGATAC
AGGATAAAGT GGGATGGGCT AGGATGGACA GGCTGTGGAT ATGGGAGTCA TGGGTCAAAG TCTTATCCA GATGGCTCCA
GGTACAGTGG GCTTCTGGG CTGGAAGCTG GGTCTCCCC ACTTCATCT GCTCAAAGCT TCTGAAGGA GCT

SEQ ID NO:1120: (Length of Sequence = 325 Nucleotides)

GAAAAACAA CCATACCTT NCTTTTGAGG AAAACTTACA AACTTTATAA AGAATAAACA TGAATCINCT TAGAAAGTTC
CAAGATAACA TACACAAGT ANTCACCTCT TCATATATAG GCACCACACA CATAAAGATG TAGCCTAAAT CACAATCACT
TCTACCCAGG GATGGAGATA GGAATTTACA TTCTTGACTT CATTAGTCT CTAATTTGGC AAAACCTCC AAGCCTTTTA
TACACATGCT GCGTGTAGGC CAGATCTCAC TCATCTTAT AATTGTGCAA ATAATATGGA GACCAAAGG GCAGGGTTTT
CAATT

SEQ ID NO:1121: (Length of Sequence = 161 Nucleotides)

ATTAGTATTT TTGTCTGTAT GTCTAGCAC TGTTCAACAA CAAATTTTNC TAGTCTTGT TAAATTTNAT TTGTATACA
ATGAAGCAC AATGTTATAA GGAAAGGTAA TTTTAAGCTA ACAACCAGTG CACAGCCTCA GGTTTTAAAT TACAACCACA
G

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CGCTCGINTG TCCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA
 AAAGATTCCA GTGCCCTGA AGAGGCTCCC TTCTCTCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA
 TACCGTCTAT AACCTTAGGG GGCCCTCGGG CAGGCAAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC
 AATGNCACAN CTACTGGTTA CCCCTTTTGA GGGGCATTTT TCCAGACAGA AGGCCCCCTG AAGCCTAGGT AGGGCAGGNT
 CAGAGATACA CCCGTTNTTG TCTCGAAGGC TT

SEQ ID NO:1110: (Length of Sequence = 218 Nucleotides)

GTITTNTTCA TTTATINNCT CCCCATAAAA CAGTATGTAC AAGGGTTTGA TTCAGGGGAG AGAAAGGATA TATGAAGACA
 CATTCTTCCC TCTTCTATTC TCTTACCTGG TTAGAAATAA ATAGGCATAT AGTCCNGITT ATTATGGGCA GGAAGGTAGG
 TAAAGATCAC CTAAGTNCIT ATGGCGTGT GGCTTTGGCA CATGGAGAAT GAGTTTTT

SEQ ID NO:1111: (Length of Sequence = 211 Nucleotides)

TTTGCTTTAT GAAGAAGCTG GCCTAGGTAG GGTTACAAAT GGGTTTTACT GAACTTAAAC AGCTAATTGC TACATCTCTG
 AAAATAATCA GAATAGAAAA ATAGATGGAA AAATTTCAAA CCCACTGTAA GAGACTAACA TAAATCCAAT TCCAAAAGCT
 GTTAATCATA CCATCTAAAA AGAAAACGTG CGACTAATCA TGTGTTTACA A

SEQ ID NO:1112: (Length of Sequence = 360 Nucleotides)

CCCTATAATA GTCCCGTGAA TAGGGCTAGC AGTGGGATTT TTGTTTATA GGCGAGGAAA TAAACACTCC TTTTGCTGAG
 ACTAAGAGC CAGGTTGGGG TCTCTGGACA CATAGTGCAA TCAAGGGAGG CTTAAGACAG CAGAGGCCCT CAGAGAAGAC
 GTTCATTCTC CCAGCTACTT GCTAAGCAGC TNCOGTGTGA TCTGGGCAGT CCTGGGCACA CCAGTGGTGA AAATACATGG
 TCCTGCCTGC CTGCGCTGGAG CTTCTATTTT CCTNATGGGA GAATGCTGCT CCATTTTGT ATTGGAGGAA CTTTTTGCAA
 GCAAAGCCTN TTTGGGGAAA AATGGCGGGC TAGAAACCTG

SEQ ID NO:1113: (Length of Sequence = 448 Nucleotides)

GCGGGTACTG CGTTAGTGAT TAGAGTTTTT NCCCTGCCGG AGGTGGGATA CACGGTAGCA TCATGGTGA GGAGGTACAG
 AAACATTCTG TACACACCTT TGINTTCAGG TCGTTGAAGA GGACCCATGA CATGTTTGTG GCTGATAATG GAAAACCTGT
 GCCTTTAGAT GAAGAGAGTC ACAAACGAAA AATGGCAATC AAGCTTCGTA ATGAGTATGG TCCTGINTTG CATATGCCTA
 CTTCAAAAGA AAATCTTAAA GAGAAGGGTC CTCAGANTGC AACGGGATTC ATATGTTTCAT AAACAGTACC CTGCCAATCA
 AGGACAAGAA GTTGAATACT TTGTGGCAGG TACACATCCA TACCCACCAG GACCTGGGGT TNNTTTTGAC AGCAGATACT
 AAGTTCNGA GGATGCCAG TGATCAGNTG CACAGTCTTA GCGTGGC

SEQ ID NO:1114: (Length of Sequence = 268 Nucleotides)

GGCCGCCAGG TGGTGCCATG NICTTNTGIN CTGTGCGTGG GCGATGTGG TCATCAGCCT GAGACCCAGA TAGGCTGAAC
 CCCGACTGAT GTAGGTTGCG CACAGGAGGG ACGGAGATCT TGCCCTGGGCA GGACGCGCGG GCGGAGCGC CACTCCCTGG
 CTGGGCAGGC ACCATCACCT CGTGGACGGG CCCGINATAC AGCCACGGG GCACACCGTG GNTCTNCGN CAGCCTGTTG
 CGAGCTTTGA TCCTCTTGTA GACAAAGT

SEQ ID NO:1115: (Length of Sequence = 342 Nucleotides)

ATCAGTGCCT TCTTCAGCTC TATCTGGGAC ACCATCTTGA CCAAACACCA AGAAGGCATC TACAACACCA TCTGCCTGGN
 AGTCTCCTG GGCTGCCAC TCTTGGTGAT CATCACTC CTCTTCATCT GTTGCCATTG CTGCTGGAGC CCACCAGGCA
 AGAGGGGCCA GCAGCCAGAG AAGAAAAAGA AGAAGAAGAA GAAGAAGAT GAAGAAGACC TCTGGTTCTC TGCTCAACCC

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GAGTGAATTGG TCACTCTATT TATGACTCAT AGCACTTACA GGCTACTTCG GCAGGGACTT NGGGTACCCC TGTTCTTGGA
 TGGCACATCA TTATCAGCAA CAGGAACAGT TTCTCTGAGC CTTGGGCCCT GGAGAATCTC TAGCTTAGCT ATTTTAGACT
 TGGGGTCAA GAAGAGAGGC TCTTTGCCAA CTCAGCAACA

SEQ ID NO:1104: (Length of Sequence = 400 Nucleotides)

GGAAGCAAGA CAAAAAGGA CAGAAAAGCT GGTTTAGGTC TTCAGTATGT TTATTTGTCC CTCACATAGC GGCTTGATCT
 GTCTGCCTGT GGTTCACAT AGTTAACCAG AAACGCTAGG AGGAAGTTGT ACCAGTGGGA TACCTCCTTA GGTGCCAAG
 TTTTATTTTG AGAAATAATA TTACTTTCTT CTTCTGAAAT AAAATAATAA TAATANGANT GAAACCCCCA AACCACAGTG
 TGAGTCTCAG GTTAGCATTT GAAACATCT CCAGAGACAT TGTTATTCCT CAGGAGGTTT CCTGACTCC TTAAATGTGG
 CTGATGTTTC ATGGTTAATT TATTTANTTT TAATAAGGTA TGAGCAATCG AAGGGGCTGA TCATCTGAGG TTTTGTACCT

SEQ ID NO:1105: (Length of Sequence = 380 Nucleotides)

CCCAGTGCAG AGGGTGACCA AGCCTGGGAA GGCCCCAGGG GTCCAACACC AAAATTAAAG GTTTATTATA CACAAGAGGA
 CGTTCTGTCC CTCANAGTGG CTGGCCACCC TCCCCACTCT GGCCAAGGTC CTGCACAGAG GTTGTCTCTC AAGGGTGACC
 CTTCTTGGCC GCCCAGAGCT AGACCTCCGG CCGAGAGGCA CGCAGTCCAT GCTGCTGGCA CAAGTCACTT GGCNAGCTNC
 TCAGCCACCG NNTTGGCATC TTGTCTTNA GGTAGGCGCC TTNTTGGCA TTCAGACTTG AGTTCAGCC ACTCATAGAA
 TGGGACGTCC ACTATCAGGA AGNCTGCAGC CACTTATGTG TCGCGGGCC AGAACAAAGG

SEQ ID NO:1106: (Length of Sequence = 334 Nucleotides)

TGTATCTINT TGANTTCTAA ACCCTTGCTT TTCCCACTGC AAATGTGTTT GGCTAGAGAG CAGGCTATTA AGACATTCTA
 GCCAAGCCAA TTTCCTGAGA GTNCTGCAGG TACCAGGTGT TGCTGGAGCC CAGCATCTGC TCAGAGGAAG GCAGAGAGAC
 CCAGAGGAAC CCAGAATGAG ACACTCATTT TTGCATCCTC AGTTTCCAAA TTAATTTTNT AGCTCCTGGT TAGGACCOGA
 NTINCAGAGA CCAGGCAGCT NTCCAACAAG AATGCTGACA GGTTTCATTG TCCTCTAGGG TAGCTGCTGN CTAAAGAATA
 TTGATTTTTT TGGG

SEQ ID NO:1107: (Length of Sequence = 346 Nucleotides)

CTCACTTTAG TTGAGTCAA TATCTGAGAA AAAAAGAAATG GAGTAAAGC ACAGAAAGCA AACTTAGCT TAGAAAATAT
 TTCTTAATTC AAAAAATGAA CAAGTCAGAT TCTGTAAAGA TATCCAGTGA AATCTTGAAG AAATATTGTA TTGATTATTA
 ATTAANCTGA TTGGAAAGTG ATCTTGGGT CACAATGAGG TTGTTGAACA AGTAGCATTT TCATACAATT GCAAACCAAT
 TCAATGTTTT TNCATACACT GTTACATTT CTTTNCAAAA TTTGATTTCT TCTTCGTGAT CCTAGTCAA TTCTGCCTTC
 TCAGTAAATC TTTATCAAGT TTGCAG

SEQ ID NO:1108: (Length of Sequence = 410 Nucleotides)

TCCTGGCGAC GTGGTCCCG TAGGAGACTT AGACCTGAGC TGGATCTGTT GACCCCAAAT TGTGCTTTTC CCACCAAGAA
 GAAAGACAGG GAGAGAAACA TTAGTACAAG TNCTGAACIA AAATATAGCA GAGAAGAAAC ATAATCTCTG AAATCACACA
 GCTATTCGGT TTCAAAGCGT TCTAGCGCC CAGCTCTCCT AACTCCTGGC CAGTGTCTT GACATTATGG TAATACATAA
 AGACTTTGTT TCCGCTGGTG TGTTCTGTG GGAAGCCTCT GACTCACCTC CGTGTCCAG TAGCACCTG TGCAAGCCTT
 CCAATGTGCG CCTTATTGCG TGGCGGGAA GATAATAGTT TGGATTNCTC TGCAAGTCAG ATAATAGCTG TATCCACTTA
 CTTGGCACAT

SEQ ID NO:1109: (Length of Sequence = 352 Nucleotides)

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SEQ ID NO:1097: (Length of Sequence = 406 Nucleotides)

CTGACCTCGT GATCCGCCCA CCTCGGCTC CCGAAATGCT GGGATTACAG GCGTGAACCA CTGCGCCCGG CATGATTGGC
 ATTTTGGGCT AAATAGTTTC TGTCCACAGG ACCGTCCTGT GCAGTGCAGG TCTTTTAGCA TCCTGGCCAC TCATAGTGCC
 CGTGGTTCTC AGTAGAAGCT GTAGAGGATG TTGGGAAATT GGGGTGGGTT GGTACAGTG CCTGGCATCT GTCTCAGGGT
 AAGGGCTTNG GAGGCTCAAG TGCAGAGTCG TATCTGGATG CCAGCAACAC CCTGTTGAGA AACTTTCTAC TATGGTATGC
 TCATCATCT CTGAAGATGT CAGGGCCTGT TTGTTGTTT GCCTGTTTCT CTCACTTTIG CTTTATAATC AGTTCTTCTT
 TGTGG

SEQ ID NO:1098: (Length of Sequence = 326 Nucleotides)

GGCCCCCGG CCTCGGCTC CCAAAGTCT GGGATTACAG GCATGAGCCA CCGCGCCCGG CCATGTAACA ACTTTTATAA
 AGTTATGATG TGATGAGTTT TGGTGTAAATG TTTTCCCTC CTCTACCTAA AACCCCTTCAT GCCTTCCCAT TGCTCTTAGA
 AAACACTCCC CAATCTGAAA CATGACCATT TTTCGTTTIN ACACCCAGAT TGCTCCAGAC TTGGTCAGTT GGTGTCCCTC
 CAAGCTGGTG CTGGTGTCTT TCCGNCATNC CCCTATTAGT TTTGAGCAC CTGGACCAGT AAGGTGTTC GTCTCACTTT
 GCACTT

SEQ ID NO:1099: (Length of Sequence = 342 Nucleotides)

GAAAACGAAC AAGTTTCAGC AGTCTAGCCT TTGGATGACC TATTTGAAA CCACTGAAAG TCGTGGAGGA ATGGGCAAGA
 ACCACCTCAT GATTCTNCAG GCCATTGCTA ACGAACAGCT CATTGCTACA ACCAGTCCAG AGGTTTTTATT CCCTCTACTC
 CGAGCAATGA AATAGACCTG AGTTATGCTT CCTTTTCAIT AATTTCGCA GATAAATAGT TTCCTGAGCA ATGGATGCTA
 TGCTTGATA CCACTCTCCA CTTTGACGC CGGAACGCC TTGGGNCAC AGTTACAGAA AAAATGTAAA CTCAGAGTGA
 TCTTGTGTA TATTGCTATA GA

SEQ ID NO:1100: (Length of Sequence = 301 Nucleotides)

ATCGCTTGAG CCCAGGAGTT CGAGACCAGC CTGGGCAATG TGACAAAACC CAATCTCTAC AAAAAATACA AAAGANTTAG
 TCAGGTATGG TGGCGCATGA CTGCAGTCTC AGCTACTTGG TAGGCTGAGG TAAAAGGNTC ACCTGAGCCC GGAAGTAGA
 GGCACAGTGA GCCATCATTG TGTGCCACTG GACTCCAGCA TAGGGAAGGG GACTGAGACC GTCTCAAAA AATTAAATAG
 AAAGTCTTCT TTTTTTAAAA TCTGCAATT CATGAGAAAA CTGCACTCAC ACATAGTGTG T

SEQ ID NO:1101: (Length of Sequence = 300 Nucleotides)

TTAAGTCAAA GGCTAGAAAT GATTAACTT AGTGAAGAAG ACATGTCAA AGCCGAGAGA GGCCAAAAGC TAGGCCTCTT
 ATGCCTAACA GTCAGAAATG CAAAAGNAAA ATTATTGAAG GAAATTAAAA GTGAAACAAC CTTATTGCTG ATATGCAGAC
 AGTTTAAATA TTCGGATGG AAGATCAAAC CAGCCACATT TCCTTAAGTC AAAGCCTAAT CCAGAACAAA ATCCTAACTC
 TCTTCAATT TACGANGGC TGAGAGAGGT AAGGAAGTTG CAGAAAAGTT TTGAACTAGC

SEQ ID NO:1102: (Length of Sequence = 174 Nucleotides)

GAGATCGAGA CCATCCTGGC TAACACGGTG AAACCCCTC TCTACTAAA ATCCAAAAA AITAGCCGGG CGTTGCGGCT
 GCGCTTGIN GTCCAGENTA CTCCGAGGC TGAGGCAGGA GAATAGOGTG AACCTGNGN GGCGGGNTTG CAGTGAGCCC
 GAGATCGGCG CACT

SEQ ID NO:1103: (Length of Sequence = 360 Nucleotides)

ACAAGGTCTT GCTATGTTGC CCAAGCTGT CTCAAACCTC TGGTCTCAAG CAATCCTTCT GCCCTGGCCC TCCCAAAGTT
 CTGGGTATTA CAGGTGTGAG CCAGCACTCC TGGCCCATCA CAGTCTTAAA ACCAAAAGTT CTGTGTCCGA GGAAAACAG

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TAAATACAAA CACGGGATAT ATTINGTCAT AGAAAAAAT GTGTACTGCA ATTATTTTGC ACTTCTGAAG GACTGCAAAC
 ATTTTTCAG CACAATAAGC AAATCTCTCT TTCAAAAAGG NATACTTNG CACATATGTA AGGTTTGGAA AATGACTAGG
 NCCCTAGGGA G

SEQ ID NO:1092: (Length of Sequence = 349 Nucleotides)

AAAGAAAATG CCTTGGGAAG ACAGATGCAT TTTTCCCCAC TGGTGTGCA ATTGCTCAAA TATTTINAGG ATGAATATCC
 TCACCTTGGA GGCAAGTTTT TAAGAGTGAA TTGAATTAC TGGAGCAGTG AACAAATTATT TAGAGTCTGG TATAAGTGAA
 GAAAAGAATC ATGACCTGTA AGCTGTCTTG NAGGTACCAG CAACTGCTCT TAAATTTTA TATGGAAAGG CAAAGGGGTT
 AGAATAGCCA ACATAATACT GNAGAAGTTG GAAGACTCAC ACTATCCAAT TTCAAGGTTT ACTGTAAAGC TACAGTAACC
 AAGGCAATGT GGCCTGGTG AAAAAGTAA

SEQ ID NO:1093: (Length of Sequence = 400 Nucleotides)

GGACCTTGTT TTACATTCTG GATTTTCCTT TTTACTTTCC TAATGATGTA ATTAACTTNC TTCTGTATT TNCCATATTT
 CCTATAAAT GGTAGTTAGA TCTAAAAGCT TGATTTACTT ATTTTCAGATT TCTAGTCAAG GGTACTCAAT AGATTGTATT
 TCCTTTTGCC TCACACGGAG GTGCATAATG TCTGCCCTGGC CTGTAGTGAT GCTAAGGTTG ATCATTCTGT TCAGGTGGCA
 TCAGTCTGTG ATAATTCTCT GTAAGAATCG TTCAATTAACC TTTCACTCTAA TGGTTCCTTT CATTCATGAT CTTTAACTGA
 ATCCCTGTGA TTTCAATTAGG GAATAGCAAA ATAATGATTT TCTAATTCTG TNATTCTTT CACATTTATT AACTGTAAAT

SEQ ID NO:1094: (Length of Sequence = 414 Nucleotides)

GTCAGTNTTC CATAACTGTT TCTGCTGAC AAAGGGGACG TGGTATGGT TCINTGGGTC TTGGCCTCTT GCTAGCTGTC
 ACAGCAGGAG GGTGGCTTTN TGGATTGGTG AAAGTGGTAT CCAGCCAGGT CCAAGAGAGA CAGGGGACAG GTTTTNCCTA
 TGCCAAATAT ACTTCAGCAG TAGAAGCCAC AAGATTACAT TATTAAATTG TCCCAAGAGT CCCCCAGTGC AAACCCACG
 TGAACGCCAT TTAGTTATAT NCTGGTGCTT TTTCTCTCTG CAGGAATCA AACCAAGGTT TCTTATGTGT GCTTGAGTTG
 GGGGCCAGAG TGCAACTGG TAGAAACTA TGTTATTTCC CAGCTANGAG AACAGAGGGG AGGGGTACAT GATAGTAGGG
 AGTCAAGTTT ACAA

SEQ ID NO:1095: (Length of Sequence = 387 Nucleotides)

GATCTGGCAA CCAATTATGT AAATAGTCAT ATGAATCCIT CAGAATGGAT AACACAGCTT TNCTGACTGG TGTGAAATAG
 TTTTCAGGTG CTCATTCTTT ACTTCATTAG CTTATCTTAT ATCATTAGCT TATCCTCCAT TCAGGTATAA CAGATCTTTT
 TTTTCIGATA AATATGGCAG TTTAGGGAAA TAACTATGG CATAATATGC TAGGCCATTG TTCTAGGCCA CGCTCTTTG
 ATTGTAACTT TAAACCTTT ATCAGAACCT AAACAACCTT TCAAAGATC TATACATATT TNNATCCAAT GTTTAAGGCT
 ATGAGTAATT CATATGGTC ACTCTTCATT TTTTTCACCT GATAATGATC TCGNCAAAA TGTGAG

SEQ ID NO:1096: (Length of Sequence = 416 Nucleotides)

AACCTAAAGC TTTAGAATGA TTGAGGTAGC TCAGAGCAAA AACCAAAAGG AAAGGTGATA TGTAGATGTC TGGGCACTCA
 CATCATAGGT TTGGATAGCT AGTTTAGGAG TAAGTGAAAC ATTTTGAAG AGCATTATATG TTAACCTTGA CAATAGGATG
 GGAGATTCTT AACCCCCCTT GTAATATGCA CGATTGATT CTNAGTTAAA ATACACCACA GTGACAGTGA TATCATCCCT
 GTACATCCTC GCCAAGTCTT CTGGCAATGT CAGCATCGCC GNCAGCCGCT CTGCCTCCAT CTCCCCATAC TCATTGTTC
 CGATGGCATG TCTGATCAGC CGGTGGCTG CATTTTGGTC AGCCTCGTGG AGCCCGCTGG CTTTCTCTG CAGCAGCAGG
 CTCGTCAATG AGNCCC

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TTCTGATTAT ATTACAACTC CAGCTGGTGA CAAGATGGCT GTGTAAATCT TGAAATCACT GAGCATTTCAT TTTAGCTTCT
 CATTGAAAGG TAGATATTCA GTATGAATIG TAAACTGGCA TTAAGGGAGA AAGTAGGNAT AATCAAACCTT GATCTGAGAA
 TTACTTGCTG GTGCATTTCC TCAATGCATA GTAATATCCT TATGANGATG CAGATGCAAA AGTGGGTTTTT GGAGGTGGAT
 AAGGAGGGCA GCT

SEQ ID NO:1086: (Length of Sequence = 277 Nucleotides)

TGGATAGCAT GAGGCAAATT GCCAGAAGAG AATTTCTTTC GCATCCTAGT AGAATAAATC CAAATTATCT TTGTGGTACT
 GAGGATGTCT GGTITAGCAC AGTGTAAAGT TGTAAACACT TAACAGGCTA TTAATTCACA GTCACATAATT CAATGCTTGC
 CCGGAGTTTTT GCTAGAAAAG GATGAGAAGG ATTAAGGTAA AAAAAAAAAA NAAAAAAAAA AAGATAAGGT TAACCAGATA
 CATCTTAAGA GCTGATTGCT CTTCATTCCC TAACTCG

SEQ ID NO:1087: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT TTTTTTTGAG ACATTGCTC ACITGCGTCG CCAGGCTGGA GTGCAGTGGT GCAATCTTGG CTCACTGCAA
 CCTCTAAATC CCAGGTTCAC GCGATCCTCT CACCTCAGCC TCCGGAGGGC NTGGGATTAC AGGTGTGAGC CACCGCGCCC
 GGCAGCATT TTTTTTAAAG ATCTGTGATA GTGCATGTTG TGCTAGTTCT TTAATACAGA CTATATTGTA TTCCATGTCA
 GTTTTTAAAG TTTATTTCCC TATTGATGGC ATTTAATTCC AACTTTTAGA TAAAAGGATG TACTGGACAT TTTTATAATT
 TTTTGGGGG ACCATGTAAG AGTTTTTCTA GGGGGAATTC

SEQ ID NO:1088: (Length of Sequence = 209 Nucleotides)

CTGGGACCAG CTGGAACAGA AGTGGTAAAG GATAACTAGC TACCTGCACC GCCAGAGATC AGGNTCAGGG TGAAGCTGGT
 TTCCAGCAG GCGAAGTGAA GGAAAGTGGT TNGAAAGGAA GAGGAGGAGC AGGAGATGGT AGGTCCCTCG CCTNTCTCCC
 NINCTACCCT GGAAATATAA GTGTCAGGTT CATACTTAAC CACCCCTT

SEQ ID NO:1089: (Length of Sequence = 409 Nucleotides)

TTTTGCTCAC AGCTACATCT TCAGAGGTGA GAACCATGCA TGACACAGAG AAGATGCTCA CTGATGGATT TAATGAGTCA
 AACATTGAAG AATCAATGAG TGCCGGAAAT AACACAGGATA GGTGGCAGCA TAGCATGCC TTAAGANCAAT GGCTGTGGAT
 TCAAATCCCA GACCAATCAC TGANTTTCAA GCCACTTTGC CTCTCTGAGC CTCTGTTTTT TCATCTGTCA AGTGGCAATA
 ACAATAAATG GTACGTGCTT CATAGGGGCA CCTTGAGGAT TAAAGAGAG GGTTCATAA AATCAAGTAC TGATTTCAAA
 ACCTGGCACA TAGTAGGCAC TCAGCACATG GNCCTTATAT ACTINTGGGC CAGCAGCGGC TGGGGCTCAT CCTCCCTGG
 CTGGGTCCA

SEQ ID NO:1090: (Length of Sequence = 337 Nucleotides)

GAACCTNTCC CCATTGGAGA GGATGAGGAT GATGATCTGG ACCAGGAGAC ATTGAGCATA TGTAAGGAGA GGATGAGGCC
 CGTNAAAAAG GCACTGAAAC AGCTCGACAA ACCTGACAAG GGGCTCAACG TGCAAGANCA GCTGGAACAC ACCCGGAAT
 GCCTGCTGAA AATCGGAGAC CGGATAGCCG AGTGCCCTAA AGCCTACTCA GATCAGGAGC ACATCAAACCT CTGGAGGAGG
 AACCTATGGA TTTTGTGTTT CAAGTTTACA GAATTTAATG CTCGAAAAC GCATAAGTTA TNCAGATGG CTCATAAGNA
 AAGGTCTCAA GAAGAAG

SEQ ID NO:1091: (Length of Sequence = 411 Nucleotides)

CCACTACCAC AGGAAATCTC TATACCCTTC TTGGCTTTTC CPTTTAATGT AATTTCTTA AAAGCTTCAA GATAATTTT
 AATCAGGCAT GCTGAAATCT ATCTAACCTA TTAGTCACTA ATTATATTCT TCAAGCCTAT ATATTAAATG TTCNTGTG
 GTAAATTCAT GATCATAAAG TTTTGGACCT GGCCATCAAT ACTAAAGCAC TGATATTTAG TTTTAGGTGA TACTTGGGCA

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SEQ ID NO:1080: (Length of Sequence = 419 Nucleotides)

CTGAACCTCC TGAAATAGG AAGTCTCAAT TAAAAATCA ATTTGTCATA GTCCACATAA AGATAATCAA TACATTTTGC
 TCTCAGTCCT TGGGATGGTT TTTGTAAATA ATATTATCTT GACAAAAACA AACAGGAAGA TCCCACCCCC AACACATACC
 ACATTCOAAT GTTACCTGGN ATTAAAAATAT ATACCAACAT GCATCTTTAG GTTACTCTGG TCCATGGTTT CCTCCAGTGG
 CAATGGAATT TACAAAAATG TAAGACGTAA TAGATATATA ATTATCTTTT TNCCTAAATG AACTTAGCCT TAAAACTGG
 TACATAATGG TTCCTGGGTT CANIGATCAA AATTATGGAN GTACACTTAA CCTATCTTCC ATTGAGTGGC TTAAATGGG
 ACCTTAAACT GTGGACTCC

SEQ ID NO:1081: (Length of Sequence = 411 Nucleotides)

CAGCGTTTAA ACCAAAGGCG CACTAAACCT CGTAAGCGCA TGANCAGATT TAAAGAGAAA GAAACTCTG AGTGTGCCTT
 TAGGGTCTTA CTTCCTAGTG ACCCTGTGCA GGAGGGGGGG GATGAGTTTC CAGAGCATAG AACTCCTTCA GCAAGCATAC
 TTGAGGAACC ACTGACAGAG CAAATCATG CTGACTGCTT AGATTGAGCT GGGCCACGGT TAAACGTTTG TNATAAATCC
 AGTGCCAGCA TGGGTGACAT GGAAAAGGAG CCAGGAATTC CCAGTTTGAC ACCACAGGCT GAGCTCCCTG AACCAGCTGT
 GCGTTCAGAG AAGAAACGCC TTAGGNAGCC AAGCAAAGTG GCTTTTGGA TATACAGAAG AATATGATCA GATATTTGCT
 CCCTAAGGAA A

SEQ ID NO:1082: (Length of Sequence = 350 Nucleotides)

CTGTGAGGGC ACAAGTGTAG GTATCTTTNC AAGTTCTCTA GGTGATTCTA GAATGCAGCA GGGTTGAGAT GCTCTGCCTT
 AGGGGTAGAG AGGTGGGAAC ACTGACAGGT TCTGCAAAAC ATCTCTGAAC AGCTGCTGGT GTCTTTTCTT GFACTTCAAG
 TTTCAAGGCA CATCTGATAG CTGTNCCGAA AGGGAAGAGA GAATTACGTG GGCTAGGCTG GTTGAAGGT TTGCTNAAAGN
 TTTGCTTGA GCGACTTTAA CAGTTTATT TCAAAGTAAT TTGTGTTGT AGCCCCACTA AAGTAATTTT GGGCCAGNAA
 AGGTTCAAA TACGGTTTTC CCTACTTAAG

SEQ ID NO:1083: (Length of Sequence = 430 Nucleotides)

GTGAAGTCCA CTGCTTATG GACAGCCCAT TTGCATGGG CCTGCGTGT GGTGCAGCC AGGGTATGTN AGGAAGGCCT
 CANAGGAGCT GCTGCTGCA CAGGTGGTCA CCAGGGCAGA GGTACACTG ACATACCTCC AGACCAGCCC GCTCCACTGT
 GGACAGGGGC AAGINACATA CCTGCTGTTT ACCATGGGGT CACGGCAGAA CCTGTNTCAC GGGTGCTTT GTGATGCCAA
 ATGGATATAG GTGGGACGTG CTGGCAGCAG CGGCCTCAGC GTGAGCCAT CTCCCTCCC GTTCTGCTCC GGCTGCCTG
 TGGGCTAAT GGTGGCACCG TTTAAGCANC TGCTGTGTG TCAGCCTGGG GGNCTGAGGG TTTCCATACA TGATCACTGG
 TTCCTACCA AGGCCTTAAT TCCINCTGT

SEQ ID NO:1084: (Length of Sequence = 369 Nucleotides)

AATGGAAGAA GTGAAAAGA ACAACACAA GAAATAAAG AAGTAACCTC TTTCACCCAC TGAAATAATC TCTGAAAAG
 ATATTAGCAA TCATGCAGCT TATAAATATC TAAAGGGCTA GAATTGAGGA ATTTATAAGA NTAANTTTTT TTTCAACAC
 ATAAAATACA ACATGGGAAA TAAGATGTTT TTTACTAACA GGCAAACT TGAGNGTCC TCTTCAAAGA CTACAGTGA
 TGAAAGACCA GTTATCCAAA GGAAACGGTT AGTAGAATA TAAAGTTAGT CCCACACAA ATTAAATGG TGCTCAATGC
 AGATTATCTA TCATTANACC ATTTTAAAG GCAATTNTT ATTTAAAT

SEQ ID NO:1085: (Length of Sequence = 413 Nucleotides)

ATACCTTNA GCTGGCATAA TTTAAGTTC TAATTATCCC TTAATCATAA GCTGTACGAT TCTATAATTA AAAAGTTAAT
 GCCTTCTTAA TGCTATNCT AGTAGAAGAA TGATGAGAAA ATAATAGTAT AGATTAGTTT TGGTCTCTAC TCATTTTGCC

SEQ ID NO:1074: (Length of Sequence = 379 Nucleotides)

GGTTAAATTC TCATCGGAAT GTATAAGCTT ATTTATTAGT GTATTTAATG GTTCATCAAT TGATAAAACA GGTGTAGCAA
ATACATGCCT TCCPTTTGGG GGATGGGCCT GGTTAATCTC CAAATGGCC GTTTGGAACA ACTCATCAAT ACTGTACAAA
GAAGGTACCA CTGGGTGGGA ACTTTCACCT TTTAACAAAA CTGGTTCATA TTTCTCACTT GCATAGGAAA TGGTCAAACC
TTGAAGTGAA GCAGAGTGCA TATGAGAAGT AGGCGACACA TCAAAAACCTG GTACAGATGT AGAGTGCAGC ATGTTTTTAC
TTGAAGCAGA ATTTGATACA ATGAGGATGC AACCATTGTA GANCTAAATT TATCAACTT

SEQ ID NO:1075: (Length of Sequence = 345 Nucleotides)

ATTAAGTTGA CAGTCCAATC AGAAATATTT AAACAAAGTT TCACTACTTA AACACCATCT AAATATACTT TTTGTTATAT
TCCCAGCAGA AATTGATGGC AAGGAATCAT ATATCCCATC AAAACCGTAT TTTTCCCCCT AAAAGGCAGT TTAGATGTC
TCATTCTAGG NPTTCCATCT CTCCTCTCCA CCATTCCAAT TCCCAGAGTA CCTCTACAAA TATCCCTGCT TACCAGTAGA
NCTATTGCT TTAACAATCT TCTGTGGGT AAGGAGATGC ATATGCCAAT GTGAAACTA TGGAGGGGA CTCCTGCCTT
CAAAGGCTGA CTAGAAACCA TTGA

SEQ ID NO:1076: (Length of Sequence = 286 Nucleotides)

TTTTTTTGA GATGGAGTCT CGCTCTGTG CCCAGTGTGG AGTGCACTGG CATGATCTCG GCTCACTGCA AGCNCGCCCT
CCTGGGTTC TGCCATTNTC CTGCCTCACC CTCCCGAGTA GCTTGGACTA CAGGCGCCTG CNAACCGCC CAGCTAATTT
NTTNTGTGTG TGTTTTTGGC AGAGACAGGG TTTACCATG TTGGCCAGAA TGGTCTCTAT CTCCTGACCT CGTGATCCAC
CCGCCCTGGC CTCCAAGGT GGTGGGATTA CAGGCGTAAA TMACC

SEQ ID NO:1077: (Length of Sequence = 366 Nucleotides)

TCACATAGGT CACATTTTAC CCATGAAACC TTTCTAAATT ACCTTTTGCA TTNTTGCCT ATCCTTCTAC ATCATCATAC
TTGCTCAATT AAAGTCACTT TTTGGGTAA CATTTAGAA ATTGGGATTC CTCTTACAAT TGCTATCAGA CAGAAGCCAA
TTATGATGTT GTCATGCTT ACACATGGN AAATAACAAA ACTGCCAGCA TGACATTTGC ATATGACAGT CAACAGCCTG
AAAGAAATTC CCAGAAATGA TACTGGAGCA TTCATTTTAC CCTCTAGGAN CCAATGGAC TNGGAAGGAA GTAGAAGATG
GGGAATCCCT AAGCAGCAGT CAAAGTAGGC TGGCTTTTCA TAATTT

SEQ ID NO:1078: (Length of Sequence = 380 Nucleotides)

GTTTAAGTGC GAAGATTTTA TTAGGCGGTA CAATTCCAAG GTGGTAAGGG TGAAAGGAAA GGCGAAGGCA GGCAAATACA
TTATTGAGCT GAAAACAACT TTACATTCAA GGACAGCTTC CAGACAAGCC ATGTAGAACC AGCATGCCTT GGGACTGINT
GGATGGCAGG GAGACGAGTT TCTATGCTGA CCACTTCATG CTTTCTSCC CCTTTGGGA AAGTATGCCT CACGGACCTC
TAACTCTCCC ACTTCTCTGG GGGCAGCACC TGACCCCTCC CGGCAACTNC TAGGCAAGAG CATTCTGTTT CTTCAAATTT
YTCACCTGAG TCTGAGTCAG AGCATYCCAT CATCAGAGCC TCTGTCAAGG AGGCAGTGT

SEQ ID NO:1079: (Length of Sequence = 439 Nucleotides)

CTTAAGTTAC TGAAATGAA ACACCCCTTG TCCCTCTCGG CGGGGGCTTC CTGGTCTGTN CTTTACTTGG CTTTTTCTCT
TCCCGTCTTA GCCTCACCCC CTTGTCAACC AGATTGAGTT GCTATAGCTT GATGCAGGGA CCCAGTGAAG TTTCTCCGTT
AAAGATTGGG AGTCGTCGAA ATGTTTAGAT TCTTTTAGGA AAGGAATTAT TTTCCCCCT TTTACAGGAT AGTAACTTCT
CCACAGAAGT GCCAATATGG CAAAATTACA CAAGAAAACA GTATTGCAAT GNCACCATTA CATAAGGAAC ATTGAAGTGT
TAGAGGAGTG CTCTTCCAAA CAAAACAAA ATGTCTCTAG GTTTAGTCAG AGCTTTCACA AGGTAATAAC CTTTCTGTAT
TNAATCAGG GTAACCCCTT TCTGTATTG AGTGCACTG

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AGACACTAAG AGTGCCTGG GCAGGTCGA CTGCAGGTGA TGCAACTTGC CAGCCGTGGT

SEQ ID NO:1068: (Length of Sequence = 412 Nucleotides)

TGGCCAGCAT CTGGGAACCT TGGGTGTGTG GACCAACTTC TTCCAACACG TGCGCACTGA TGGCCGGGGC CCCAGCCAGG
CCTGNCCTGA AGGGTCTTCC CCGNCCCGAG GGACTGTAGG GGGTCTCTAG GAAGCATCAC ATCAAGGTCC TCAGGTTAGA
TNCAGNCAG CCCATTGACC CATTTNAGGG GACAGCTGGA GGAAGCCCG GAGTCCCTTG TTTCTTCAGC TGAG

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TCGCTCATGA AGATAATTGA ATGCTAGACT GATTCTGCA GAGTAAAATC TGGCATGTC TTAGGAAGT TTTCTTTGTC
GCTGCATATG AAACATTAGG TCTCTCCAT TTACATACTC TATAACAAAG AACAATCTGC TTTCTGTCTG AAAGCAAGAA
TGCAGCCTAA CAAGGAAAGG ATGATGGAT GCTGCTCAA ACACATGCTT CTCGTCTGT ACCCAATCAA TATCCTCATC
ATCATTACA AGCTCTTTT TCACAACCTT CATGCTATA ATACGATCTG TTTTTTTTAA TCGAACCAAC AGTACTTTGG
CATAACTTCC TCTTCTTATT ACCCGGAGCA AATCAAAATC CTGAAGACCT AGACTGGATG AAGCTTTGCA CTTTCCCTGG
NGTCATTGCC TC

SEQ ID NO:1070: (Length of Sequence = 358 Nucleotides)

GTGATTGTC CACTGCACTC CAGGTGGGT AATGCAGCGA GACTGCGTCT CAAAAAATAA ATAAAAATAA AAAAAAATAA
AAAAAATAA AAAAAAAG CACCACCGCA CTCCAGCCTG GGCAATAGAG TGAGAACCTG TTTTCCAAA AGAAAAATNT
TAAAAGANTG ATCTNGGCCA GCGGTGGAGG CTCATGCTTG NAATCCAGC ACTTTGGGNG GCCAAGAACA GGTGGTTTAC
TTGAGNCAG GAGTTCGAGA CCAGCCTGGC CAACATAGCA AAACCCCAT CTNTACTAAA ATTACAAAA GTTAAGTGG
CATGGTGGTA CATGCCCTNG TAATCCAGT TACTTCCG

SEQ ID NO:1071: (Length of Sequence = 411 Nucleotides)

CTATTTATGA ATTCTGCAT TGGTTTCGAA AACTCAACAC AGTTAAATGA ACAGGAATTG AAGGTGCATG ATGGATGCGT
CCCCTATAGC ATTTAAATCT CTCCACTTG ATTAATAAT CCTAGTTCCT CTTCCTGAA TTGTTTAGAG TTTTINAGCA
GCCTCTGCC TGAATAAAC AAATTAGCAT CAAAGATCCC CTGTTGAATG AGAAATCATT AATTGAGAAA CATGCATGC
TCCTTAATTA CTTTATAGAAC AGTGAGAGAA CAAATAATCT CAGGTTCAG AGGGCCCTGC CTGCTCTGCA CGGTGAATC
ATTTCTGTA GCTGCTGGA TAAACTCAA GTAGGCAAC ACTATTGGG GAATATCAAT GCAAGCTTTC AGTAAACACA
CTGTAGGATT G

SEQ ID NO:1072: (Length of Sequence = 342 Nucleotides)

TCCCATTTTT ATAATTATTG GAACATGAAA CTGTATTTCT ATGAACTCAA TGATTTTTTT CCATAAAATT ATATGCTAAG
AGAGTCACCA CAAACTATG AATCTCTCC CGAATTATTT TTGCTTCCTT GGAGCACCAT AGTCTTTGTT CAAATCACAA
CATGAACTG TTGCTGCAAT GCTAAAGATG TGAATCCACC ACTATCAATA CCGTCAGGGT AAAACCTGGA GCCACATGTT
ATTCAAGTTA TTTTGTAT CTAAATGATT ACATGAAAT AAAATAGTAA GCCAATATTA AATTGTAGG CATAGTTGCC
CCACCTNAAA AGTGTATACA AA

SEQ ID NO:1073: (Length of Sequence = 217 Nucleotides)

GTTCCTGTC CTGGCTAGGA TAATGCAAGC NCTTTTCAGA TGANTCAGAA TCGAAGAAAA TACGCTGGTA AAACAGGACC
TGATTTACCA GGNACTAAAC AATTACACTC CCATTTCCAT TGCTTTCAAT ATTTTCACAC GNTACAGAA CCTTTAAGAT
GGAAAGGGAA AGCGATTTTT TTTTCAACAA GTGGGCCACC AGATGAACCA AATTAGA

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TGAATGGTTA ACCAACCCT AGGCTACCAC TCIGTATTTT ATCAGGGGTA GGGGTATTAA ACCCCACATG CAAGTAAGGA
ACCCCTGCCC CCAGTGTGCA AATGGGATGG GGATGCT

SEQ ID NO:1061: (Length of Sequence = 206 Nucleotides)

AGAAAGTAAG ATTCTCAGGG CAACAGTGTG CAGCAGAGTG GTTGCTCCAC AGACAGAGGA GGGCAGAGTG GCCCAGAGTA
TCAGCGTACA GCAAAGTGGG TGTTCCTATC CACAGGGGCA GCGCTATCTC ATAGGANAGA ACAACCCCTA GGAAGGCAAG
CGTCAGNCAG NCAGCAGTGN AACAGTCAAC AGTTAGCCAG TGTGAG

SEQ ID NO:1062: (Length of Sequence = 316 Nucleotides)

TINCCCTCAC AGAGTTTTAG TTAGAATCAC TTCTCTATT TCCACAAATC CTCTTTTCT TTCTTTTAT TTCTAAAGT
GAATGTCCAA GCAAAAAGGA AGCAAAAATG GTCAAAGATC TCTCTTACAA TATAGTAATA AATTTATNCA AACCACTTGG
AATTCACCTT GTGCATTGAA AATNCAACTC CACACTGCAA ATTATGGCAT TTTTCCCNCT TCAAAGGAAT TAGTGAACCTC
CATTGGATGC ATTCTACTIN CTGTTTAGGN AATAAGGGAA ACCGCTTTGT AAAAGTNCAT CATGGCCTAG GAGTTA

SEQ ID NO:1063: (Length of Sequence = 314 Nucleotides)

ATGATCTGGT TTATGCTTCA GAAGAAGCAT AGTAGCTTCT ACAGAAAATA AATGATAGAA GGCAAAAGAG AAACATGGCG
AGTATTCAC TCCAGTGTCT AGTCAAGAGA TTACAAGGCG CTGGCATGA GGACAACAGT AGAAATNGTT AAAAGTGTAC
TGGATTGCAA AATATTACTT TTGGGCCAGG GCGCCGGNGG .ACACGCTT ATTAATACCC AGCACTTNTT GGAGGTGCAG
GGAGTTNCGA GTACCACTCC TGGGCCAACA GCGTGGGAAA TCCTGTTGAA AAATATAAAA ATTAGCCGGG CCGT

SEQ ID NO:1064: (Length of Sequence = 322 Nucleotides)

GAAAGCATTT GAACTAAGTN TGTAAAAATG GCAGATAATA ATTAACACTT GGTAGCAAGA AACGCTTTCT GAAATACTGG
GAACACTGAC TTGTTTCACT GTAACTTATC ACCTAGTGCT GTATCTGCCA TAGTGCTCAC AATTGCAACT TTATATCCAA
CATGGGTGTT CCATTCTAT TTGGATAAAA TTACTGGGAA ATATACTAGC AANGAAAAAC TGGTCTTAAA ATGGCAAAG
GCTCTGGCAC TAAATCACT GCTACTTAAC TTAGTTTACT AATTAACTTC CTTAATTATA GTTTTCCAAA TCCGATGCA
CG

SEQ ID NO:1065: (Length of Sequence = 297 Nucleotides)

CCCTGNCAC TCCTTGCAATG GACTGATGCT GGAACCTGGG TCAGGGAGCT CCAGGAGGAA CCAGACAGGN TCCTGTTAGC
AGGCTCACCA CAAGTTCTAA AGGGCACCAG CCTTGAGAAG GGCAGTTGGG ATGTGGCCAA ATGTGAAGCC AGGTTTNCCTG
GGATCCTGAC TGTCCAGGT TACAAGTTCC TGGCCACTCT GTGAACCTTG GCAAGTTAA CTTCACACT CTTTACAAGT
TCCCTAATCT ATNAGGAAAC ANTTAGTNAC ATGACCTTCA TGGGAATTTA TTTATGA

SEQ ID NO:1066: (Length of Sequence = 267 Nucleotides)

ACAATGGGAC TGTGAGGCA GCCAGCTCCT CCCTGACTGC TCCACAGGAA GAGCCATCAA CAAAGCCCAT CCCTGGAGAT
AGGCTCTGAA ACCAGGATAG AGACTCCTTC AATGGCTGCT GNTGGTTCCA CCATGTATCA TCCAGAGNAA TCACCTGAG
TGGGCATAGG TGGGCTGGG AATCTAGGCG ACAGCAATTC CACACATCTT CACCTAGAAA CCCTCCTTCT GGGTGGGCT
GCATGGTTTC ATGCTGTGAA ATCCAG

SEQ ID NO:1067: (Length of Sequence = 220 Nucleotides)

AAAATGCAAT TGGTTTGTG CTGAGTACTA TTGTTGGGAA GACAGCATCC TGNACTCCT CTCTACAGAA TATTGGGAGT
AAAAATGAAT GTCATCCCG GTGGGAAATA TTATTGGGGG TTGGAAGCAC AGAGCACAGG AAAAATTAG TNCAGGAAAC

CGTGGTCTTG CCTGATATC AGGAGTGGGA GCGGAGAAC CTTGCTGT GAAGTGTAA CAGNNICTTT AAAAGGTGGG
TGGCATCTGG GAGTTTGTTC CATTCTCTCC CCAGTGGGG

SEQ ID NO:1053: (Length of Sequence = 195 Nucleotides)

GTTGCAAAAT TGTATCCCA GTGTGGCAG GTGGGGTCCC AATGGGAGCT ATTTAGGTCA TGAAGGTGG ATCCCTCATG
AAATAGATTA ATGGCCCTCC CTTCCAGGT AAGTGAAT NCTCACNCTG TTAAGTTCCC ACTGCAAGAA GTTGGTTGAC
CAAAAAGAAG CCNCGTGCT CCCCCTAACC CTGA

SEQ ID NO:1054: (Length of Sequence = 319 Nucleotides)

ACAAAACCAG ATGTTCTCAC AAGAGCCCT GCTTCAGAT CACTTACATA GTTTTGGGG AAGCCAAGAT CGAAGATTTA
TCCCAGCAAG TCACAACCTAG CAGCTGCTGC AGAAATTCAG AGTTCAAGGT GCAAGCTGTC TCAACATTG CAAGCAAAAC
ACACAGTACT TCCAAGTGT ACAAGAGGAG GAGTCAAGA GGAAGAGGT CGCTGAAACA GTTGTAGTA AGTTNAAGGT
ACATAGANTT GGTTCATGTT CACAAGCAAA TGTGTTCAG GGNCAAGGN CAGTTCCGAG CCTGTAGT AACACAGT

SEQ ID NO:1055: (Length of Sequence = 205 Nucleotides)

AACTCAAATA GGAGCTAAAA AAAAAAAAAA GAATCAATGA AACAAAAAT TAATTTTTG AAAAATAA ATGTATAGCA
CTAGCTAGAC TAACCAGCA AAAAAAGTAG CAAGTACCTA AATGAAAAC TGAATGNA AAAAGGAGGA CATTACAAA
TNAACACAG AAATACAAA GTTCCATGCA GCGAATTAT TCAG

SEQ ID NO:1056: (Length of Sequence = 165 Nucleotides)

TGCAATTA TGATTTCTGC TTCACCAGAT TGGTAGAATG TATAAGATGG TGCATGGGA AGCATTAAT ACCCAACAAT
ATCTGATTAC ATTGAATCA CAATGGCTC CTAATCAAT VAGTAGGTT ACTGTTGAG CTGVAAAAC TTTGAAATA
ACTG

SEQ ID NO:1057: (Length of Sequence = 203 Nucleotides)

CITTCATTA AAACCATCA CAGAAATGA CAGCTGGGT CTGTAACAA GCATTCATGT TTTAGAGCAT AGGTCAGTAA
TTGTATATGA GAGCATACAC TGGCTACATA CAAATTAAT GTTCAGNCC ACACTTTIN CAATGTTAA AACAGGATNA
AGCCTTCCCT GTGAAAAGCA GCACCTTGT GAACGGTTCT TTG

SEQ ID NO:1058: (Length of Sequence = 201 Nucleotides)

AGTGCAATAT GCACATTACT AAGCAGAAA AACAGTGT AATCAGAACT ACTGCATTT TTTTAGTTA AATGCCAATG
AATTATTATG CTTAGTTTT ATGAACCTGN CTNCTCTG TGCAATTCCT TCCTTGCAA TGAATTGACT TNAACGCCGT
NAGTGAATAG CTCAGNCTG TAGGATGTC TTTCAATTT T

SEQ ID NO:1059: (Length of Sequence = 176 Nucleotides)

CCCACTGGC TACATACATG TTTTCAAAAT TAAGTTTTCT GATGGCTCAT CATTGCCAT CTCTCAAAT CCAGGTCTT
TTAAAAATCT ATGACCTGG AATGAATGTG CCAGAAATACC TGTATCTGG AAGTCCATGC GAATNTGGC NTGACTGCC
ATCCGCCATC TGCTGG

SEQ ID NO:1060: (Length of Sequence = 277 Nucleotides)

GTCAGAGCA GTGTACAGT ATTACAGTCA GCCACAGAG CTGTGTGGG GGACAAGACC CAATCCCTCC CCACACCAGG
CAAAGCAGTA TTGACATGA GTGGCATGT GGCTGGGCC ACGTCTTAT CCCCAGGNC CTGNGGGAG ACCACCTTC

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CCAGGTGCAA TCTGGGCTCA CTGCGACCTC TGCTCCGCG TAGTGGGACT CCAGCTGTGC ACCACCCAGT CAGCCCCACG
 CCCACCTGTC CAGGCGTGTG CACGGTTCAG CGTCACTTTA CAGATGAGGA AACTNAGTCT TTGGGAAGCT GACAAGGTGC
 CTGACACAGG CCAGGGCAGG GNCACCCCTC ATGGGCTGTG CTGCAGCCTC TGCCTCGTGG GTCACGGCAC CCCATCTACG
 AGGNGCCCTT CAAGGATGCG CCGTCGAGTN CCCGGGGCCC TTGGCATGTA CCTGGCAGAG AAGGCAGCTC AGGGGT

SEQ ID NO:1047: (Length of Sequence = 261 Nucleotides)

CTTCTCAAA CTCGGGTTC AGCTGGGTCT CAAACTCAGG CTCCAACCTG GTCTCAAACCT CGGCTCCAC CTGGTCCCA
 AACTCGGGCT CCACCTCGGT CCCAAACTCT GTCAACACCT CTTTNTAGGT CTCANTCTCC GACTCCTCCC AGCCAGCGGT
 GGTGCGCGT ATNAGGCCCC AGGGCTCTAT GGTAGTGCTC AGGGTGNGTG GCAGGGGCAG GGGGCAGCTT GGGAGGCACA
 GTGNGGGGG CCTAGGGTGG T

SEQ ID NO:1048: (Length of Sequence = 390 Nucleotides)

GAGAACAAAG AGAATGGAGG CCACATACAA TGGAGTAACA GAAGCTTTGC CTGTAGCTCA AGAACCAAGC CGAGAATCCA
 CACCTCTGA TTCACAGTTC AGTATTTTTC GCCACTTTAC TCAAATATTT TTATAAATTA TTTTAAATC GGCAAAATAT
 TTAAATTTCA TCCATTAAAT TTAAATTTCT AGATGCCCTA GTGGCATCCA GAACACATAT TINGGGGAAA ATATTCTAAT
 TTTTTPAAC AGAAAAAGCT AGGNNCAGAT GATGCATTAA AAAAGTAGAA CACAGAGCTC TTAATTTAGG AATGATCAAA
 ATAGGGTGA TTCAACTATT ACCTTCTCTT AGGGATTATG GATCAACCCC TAGCAGCAGN CAAAGTCACA

SEQ ID NO:1049: (Length of Sequence = 335 Nucleotides)

AAACTCACAA GTAAATAAT GCATATTTAA GGGAAATATT ATACAGACTT TTTACACAG AAGTACATAA TANGATTTTT
 TAAATCTAT TGCCATTCAT TTATTTTTGC AAAAAACGT ATAAATATGT CACCAGCTTT NCTTAACCTA AAAAACTTAA
 ATAAAAGACA CCAGATGAAA ACTACCCCTT GCTGCCATTT TTTTFTAAGT TTTTFTGTAG GGGTTTTTFA TTTTGGNGT
 TTTTNTCTT TTNTGCTTA GAATTGGGT TCTAGGGAAG AAAAGCCCCT GCATTAAAAA CAGNCCATTT AAAAAAAAAA
 TTCAAAGTTC TGGAT

SEQ ID NO:1050: (Length of Sequence = 265 Nucleotides)

AAAGGGAGGG AGGGAGGGAT GTGGAAAATA TGCAAGATAA ATTAATNCT TAGTTAAAAA AAAAAAAG TTTACCAAC
 TGINTCCAT TACTGAGAAG CCCCCACTT GCCCACTGT GCATATTCCT AGTATTTTAT CCATGCTCTG CTCTGCTGTG
 CTGCCCTACA AAAAANCCCT CCCGGGGGGG AAAAAAANC AAAAAANCGG TGTAGTGTA ACTGCTGAAG AACTTAAATG
 TTCAAGNGCA TCTTTAAAGT CTAGG

SEQ ID NO:1051: (Length of Sequence = 298 Nucleotides)

ATTTCTAAAA TGCTCTCAA TACTAATATT ATACATTCTC CCAATTATCC TCAAAAAACC CATGAGACTG GTGATGTAAT
 TNGTGTGTC ATTTACAGC TGTGGCAGTC AGTCTAAAGA CCAAGTGATT TGCTCAAAGT CATGGAACAC TTAAATGGCA
 GAGCTAAGGC TTAAACCCAG AATTTAAAAA TTTTNTNAG CTTCTNGTTT TTNCCATTAT ACCAGTTTGG CCCTTCATTT
 TATTCATGGG TTAAATTAAA TTATGGTAAC AAAGGGCCCC TGCTCACTTT GGACATTT

SEQ ID NO:1052: (Length of Sequence = 359 Nucleotides)

AAGGCAACG TGGTACATCA TGACACCATG GGAATGACTC ATGCCAGCCA TAAAAAGAAT GAGAATTCTG TCCAGAAATG
 GTTCTTCCG GTGGGTCTT GGTCTCGCTG ACTTCAAAAA TGAAAGCCAT GAACCCCTGT GGTGAGTGT AACAGTTCCT
 TCAAAGATGG TGTGTCCGA GTTNTTCC TTNCAAGATG TTCCAATGT TATCCCAAGT TTCTTCCCTT CTGGTGGGT

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TGGGGGCAGG GACAGANCAG CAGGAACCTA GCAGGGACAG CAAGGTGCTA AGCAGTNA GT GCTTTCAAGG GCAAAGGTTA
GAGCTG

SEQ ID NO:1040: (Length of Sequence = 399 Nucleotides)

GAGGTCAAGA AGAGCTTAAG AAAATATAGG AGATACTACA GCATGTTTGG TTCTATGACCG GAATGATTTA GTAAGAAGGA
AAAGCCAATA ATGTAAGAAA GCGGATTGCA GGAGCAAAGA CTTTAAGGAA TAAAAAGGNC AAAATGTTT GTTCTCAGG
GAAGTAATGA CAGGGGCTGA GCAGGAGCCA GGAACCCAG CTTTATAGCTT CAGTCTGCC TGACATTTAT TGGTCATGTG
GCTCTGGGIG TATTCTCACT TCTCTCCCT AAATAGCAAG AAGGAAAAGC CTCTGGAGC CTCGTGCTC TGCTTCTTTC
TGTAACAATGG TTAATGTTCT GNTCCGCTTA GCTGGTAAAT TATAGAATCA CCTTNGCTGG GGTCMTTGG GGA CTGGCC

SEQ ID NO:1041: (Length of Sequence = 324 Nucleotides)

CCATAACAG TCGTCACTG ACAAATGTTG TTACGCAGCA CATTTATGC AGTGTGTGAC CATAACGAT ACACAGAGGA
AATTCAGGC TTCTAGGAAA CCTCTAAGG CCTCATCTCC CTAGGGCAC CTGATGAGCC ATTCTCACC CCTGCACTGC
ACCAGGNTC CAACACCACC ACCAAGGCTA ACCGCTGTG ACTCTGGGC CTGGGCTGC AGTACCTGGC TCCCAAGCAC
ACCAGCATCT GAAAACTTGN CATCCTTGCC GATNTNCGG GGAGTATGG TTGATTGCAG TGACAAATCG GCAGAAGTTC
CGGG

SEQ ID NO:1042: (Length of Sequence = 212 Nucleotides)

ATCTGTTCT CAGAGATGAC ACTGCCAACA ATCAGAGATT TGCATACAAT ACAGTTATGT ATTGGCTATT CACAATTAC
AGTAGTGTG TTCCCTCTGA AAAATATAAG TNCAAAAGCT AAGTAAACAA TNGGTACTG CCATTGGGN TTTTITACAT
GNCCTTAGCT TAAAGAACTG GTCCTTAGCA AATATTCAAC AGNTCAACCT GA

SEQ ID NO:1043: (Length of Sequence = 329 Nucleotides)

ACTTGGAGAA AGAAAAATTA GAGAATTCCA GATCCTTAGA ATGCAGATCA GATCCAGAAT CTCCTATCAA AAAACAAGT
TTATCTCTA CTCTAAACT TGGATACTCA TATAGTAGAG ATCTAGACCT TGCTAAGAAA AAACATGCTT CCTTGAGGCA
GACGGAGCTA TTCCAGATGC TGATAGANCC ACTTTAAATC ATGCAGATCA TTTATCAAA ANTAGTNCAG CAGCAAGATG
AAGAGOGAG TCGGCAGCTG AGAGAGAGAG CTCGTACAGT AATAGCAGAN GCTCGATCTG GAGTNAAGAT NTCAGAACTT
CCCAGCTAT

SEQ ID NO:1044: (Length of Sequence = 285 Nucleotides)

GTTGAAGCTG TTTTNAATT ACACCCCTCT GTTTTAAAC ATAGGGACTG ACAGGGAGAC CCAGGGCTGC AATCTGGGTG
GTGCTACATT TGTAGACAAG GACAACTTGC TGTATTTTAA CCCAGAAACA TTAGAAAGTT TGTCCCTGAA CTCTGGCTC
AGATTTAGAT GCATCTTGA AGTGTGATA TTTGGCTTAT CTGAAGCTTT GGGATTATCA TTINCTAGTT ATGAAGGGAA
TGAAAGTGT CATAACAATT TTGCAGGTG AAGGTAAAGT TGTG

SEQ ID NO:1045: (Length of Sequence = 317 Nucleotides)

TCGGTTACTG TAGTATTGTA GTATAGTTTG AAGTCAGCTA GTGTATGCC TCCAGCTTTG TNCCTTTTGC TCAGGATTGT
CTTGGCTATA CAAGGTCTTC TTTGATCCCA TATGAAATTT AAAGTAGTTT TNCCTAATTC TGTGAAGAAT GTCAATGGTA
GTTTCATGGG TATAGTATTG AATCTATAAA TNAITTTGGG CAGTACGGNC ATTTTCATGA TATTGATTCT NCCTATCCAT
GATGATGGAA TCTTTTCCA TTTGTTGGG NCTTCTTTA TTTCTTGAG CAGTGGGTTT GTAGTCTTG GACAAGA

SEQ ID NO:1046: (Length of Sequence = 316 Nucleotides)

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AGTGGCTTAC AAAACACAAA TTTATTATCT TACCATTCTG TGAGTCAAAA TTCCAAAATA GGTGTCACTA GGCTAAAATG
 AAGGACTGCA TTININCCIG CAGGCTCCAG GAGAGATCTA TGTCTTACTC TTINCGGCTT CTAAAGGCTG CCCACATTCC
 TCGACTAGTG GCGTCCCTCC TTCATCTCTA AACCCAGCAA CAACAGGTTG AGTCTCATG TCACATCTTT NITACCTTTC
 TGTCTCTCA TCTCGCTGAC TGCTGCTGGG AAAAATTCTC CACTTTTAAG GGCTATCATG ATTAGACTAT GCCCACTAGA
 TAATACAAGA TCTCAGATCC CTTAACTTCC ATCAGATCTG CAAAAGTCGC TT

SEQ ID NO:1034: (Length of Sequence = 320 Nucleotides)

CGCGCCGCGA CGGACGCCCT CAACCGGCAA ATCCGCGAGG AGGTGGCGAG TGCACTGAGC AGCTCTTACA GGAATGANTT
 CAGGGCATGG ACGGACATCA AGCCTGTNAA ACCAATAAAG GCCAAGCCCC AGTACAAGCC CCCAGATGAT AAGATGGTTC
 ATGAGACCAG CTACAGTGCT CAGTTCAAAG GAGAGGCCAG CAAGCCAACA ACAGCTGACA ATAAGGTCAT TGATCGCAGA
 AGAWTACGCA GCCTCTACAG CGAACCCTTC AAGGAACCCC CAAAGGTGGA AAAACCTAGT KTTTCAGAGTT TCAAACCAAA

SEQ ID NO:1035: (Length of Sequence = 375 Nucleotides)

TTTTTTTTTT TCAGTGGAAA ATAACCTTNA TTGAGACCCC ACCAAGTGA AAANCTGTNC CTGGCAITTA GCTCCTTCIN
 CCTTTCGAAT TCGGTCTTTC TTCAGTGGTC CCATGAATGC TTTCTNCTCC TCCATGGTCT GGAAGCGGCC ATGGCCAAAC
 TTGGAGGTGG TGTCAATGAA CTTAAGGTCA ATCTTCTCCA GAGCCCGCCG CTTCGTCTGC ACCAGCAAGG ACTTGGGAG
 GGTGAGCACC CGCTTCTTGG TTCCCACCAC ACAGCCTTTC AGCATGACAA AGTCATTGGT CACTTCACCA TAGTGGACAA
 AGCCACCCAG AGGGTTGATG CTCTGTIMAG ATAGGTCATA GTCAGTGGAG GCATT

SEQ ID NO:1036: (Length of Sequence = 304 Nucleotides)

CTCTATGTCT TCTTCTTTTT GCTTCTCTC AAGTAGAG TGACTTTTTT GAAGGTTAGC TTCTTCTAAG AGTTGCATGC
 TATTNCTGGC TCTTACAATA GCTCATATC TCTNATTINC TAATTCATTG CACTTTGCTT GTAGCTCTCT GGTCTGTTTT
 TCCAGATGIG TATTINCGN TCTNAATGG TTGGCTTCTT GGATTGTAC ACATAATCTT ATTTCTAATT GTTTTATACT
 AGACTGTAAAC TGCTGTAAAC GGCTATCTGA TGCTTCTCT CTTCATGGG CAGACACCAC ATCC

SEQ ID NO:1037: (Length of Sequence = 341 Nucleotides)

CTATGAGGAC CAGCAATTAG ATTTTATAGC AGTACTTCCC ATTAAAGTGA ATAACCAAAA TCACTTTAAG GTCAAGATCT
 TAGTCAATAC ATTATGTAAA ANCATATACA ACAGACAATA CACCAGAAAC TAAATCTTTT GCAACCTTTT AAACCTATGA
 TGAAAAACAT TAATGTACAG TCTAAAATGT ATTAAGCAGT TTTTACAAAA AAAATGTATA GAATACAGGA GCCAAAACAT
 TTANCAATTA CCTAACCTG CTGACACAGA NTACTATTAA TAAATAATAC TGATCANNGN AAAGTAATCA ATTTGAAAGT
 GGTGGGGGTA GAAGGACAAC A

SEQ ID NO:1038: (Length of Sequence = 281 Nucleotides)

GGAGGCTGAG GTGAGAGNT CCTTGGGCC CAGGAAGTCA AGGTTGCAGC AAACAGTGAT TGCACCACTA CACTCCAGCC
 TGGGCAACAC AGCAAGATCC TGTCTCAAAA AAAAAAAAAA ATATCAGTAT TGTTTTATTA ATTGTAACAA ACACACTAAA
 TAAATGTAAAG ATGCCAACAC TAGGGGAAAT AGGATNTGGN GTAAATGGGA ACTCTCTGNA TCATTTTTGC AACTTTCTG
 TACATCTTAA ACTATTTTAA ATGNTTCTAC AAAAGTTAAC A

SEQ ID NO:1039: (Length of Sequence = 246 Nucleotides)

CCAATGATGG CAAACATGAG GATGGCAAAG AAGAGAAGCA GCCCAATCTG CAGGAGTGA ACCATGGCCT TCATGATGGA
 CTTGAGCACC ACCTGCAAAC CTGGGGCCAG AACAGGGCAG GTCAGGAAGC AACGTGGGCA GGGTAGGGCA AGGAATTNG

275

SEQ ID NO:1028: (Length of Sequence = 401 Nucleotides)

GATCATCATG CAGCTCAACT TTCTGTGGA TTCCATGCTA AGCAAGCTAA CCTTATCCIG CATGTGTTAGC ACTAGGCACC
 CAGCTGCCAC CTCTCCATCC TGCTGCCCTT AGGCCACATG GGAGCAGTCC ATGCATGACA GCCTCTATCC TACAAGGCCT
 ATGAGTATGG ATTGGGGGGG CCAAAAGGAA AAAGCTCCAT GTGCCCTCTT GTCTGCGTGG GTCAGAAGAG TTGTGCACGC
 AGATTAGCAG GCCAAGGTCT GAGCCACAGC AGCATTTTTA TTTCAGATTT TGATAACTGT TTATATGTGT TGAAACCAAA
 NTGNCATCTT TTAAAGCTT ATCCATAAAA AAAAATAGAT GTCTTTTATA GTGGGAAAAC ACATGGGGGA AAAAATCATC
 TATTTTGATG CAGCATTGA TAATGNTAA ACACCTCACA CCTCACTCTT

450

GAAAAATGCC AATTGGATGC CCTTAGGTGG AGGTGAGAAA ATGGCATCCT TGCCCTCTTC TCAATATGAA ACATTAACCTA
 GTTGACAAAT TTATCTTGT AGAAATGAAA ATCTATTTAA TCAGGGACCA GAAATGGCTG AGGAGATAAA TGCATCATTA
 CAAAATTCTG CTTTTGAATC CTGGACATTA CAAGGGGGTA AATGCAGCAT GACTTTTTGT TAACCACATT CCAAAATGTG
 GAACATTTCT TTTAGAAATG AAAATATTTT AAGGCTGATG TATTTTAAAGN CTACACATTA TCAGGGNCAT ACATTGAGAG
 TTGCTTAAT TAAAGTGTG TGGGCATCA ATTATGTTTA GTAGGTACT ATTCTTAAC AACTCAAGN TGCTTTAATG
 G

SEQ ID NO:1030: (Length of Sequence = 340 Nucleotides)

TTCCCGCTTG ATTCCAAGAA CCTCTTGAT TTAAATTTTIN ATTTTAAAG AGGGAGACGA TGGACTGAGC TGATCCGCAC
 CATGGAGTCT CGGGTCTTAC TGAGAACAAT CTGTTTGANC TTCCGTTCTG GAGCAGTTG GGGGCTTGGT GTGGACCCCTT
 CCTACAGAT TGACGTCITA ACAGAGTTAG AACTTGGGGA GTCCACGACC GGAGTGCCTC AGGTCCCGGG GCTGCATAAT
 GGGACGAAAG CCTTTNTCTT TCAAGATACT CCCAGAAGCA TAAAAGCATC CACTGCTACA GCTGAACAGT TTTTTCAGAA
 GCTTGAGAAA TAAAACATGA

SEQ ID NO:1031: (Length of Sequence = 452 Nucleotides)

CCAGGGGAAG GNTCCCAAGG GACGGGCTGG CAGCCGACA CATGGACAAA CTGATGGACC CAGGACTGAT CAGACAAAGC
 TCTCATTAGC AGAATGTGGG CACCTGCACC CAGGGCCCAT ACCACGTCCC TGTGAGCAAA AAAGCTTAAA GTTCTCCCTC
 CAGGCCCAGG GCCAAGAGCG CCTCACAAG GGCTGCTGCC TTGAACITGG CCTGGGGAAA TNAGACCCCTG AGCGGACCAC
 AGCCCTTGAG CCTGGGAGG AGCAGCCCAT CCAGNAGCAG CACAGCTNCC GAAACTTGAG GAAGAAGACT TCCACCCATA
 GCACAAGAAC TGCAAACTACT GTCTINGENCA GAGCCACCAG AGGCCTTAGG CTTCTTAGGA CACCGATATC CCCCAITCAT
 GGGGTINGGA GGGAGTGGCT TTTTLAGGCA AGGGACTTTG TTAGAGAGGT TT

SEQ ID NO:1032: (Length of Sequence = 411 Nucleotides)

GAATCTACAG AAACATAAAT TATACTGAGT TGTGCTGTAC TGGTTTGIGA GAACATCAGT GTATTAAAGGA GAATGGTAGT
 TTAATTTGAA TATTAAAGA AAGTAATTTG AATGGTCTTA GTACTAGGCG CATTATTAAAC TAGTAACATA GATTAGTGAC
 TTCAACTGGG TGTCTTATTT ATCTGATTG TCTGAAGTGA AAACGTGTA GGTGCTCTTT TAAAATGTAT TTGGAAACAC
 CATAGTTAGG GTAAATNCAA TGTCACAATT CACTCTTGCA TATTATTINC TTAGCCAAAT TTATGAATTC TAAGTTAGGC
 CAAATTGAAG GTTGGAGTT TTACATTGTG GGNAGTCTA AATTCATCGG TTTGGCAAGC ACCAAGNCA TGGGGAAAGA
 ATCTGGTATT T

SEQ ID NO:1033: (Length of Sequence = 372 Nucleotides)

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AGCAACAGAA GAAAGGGCCA CATATATGCA AATGCCTGGT CACTATATCT GGCCCTGAAG AAGGAAGGAG TTTGCAGGGC
 TCAGGAGACT GGAAATTTTT NCCAGGAGCT AGGAACGAGG GGTGAGGAGA CGTTGGTCAA AGGGTACAAA GTCCCACTTA
 TGCAGGATGA ATAAGTTCTG AAGACCTAAC ATACAGCCCA GTGACCATAG TGAATAACAC TGAATGANCA GTATACTCGA
 AATTGTCTAA CAGAAGAGAT CTTAAGTGTT CTCATAACAC ACAAACATA GCAACTGTAT GAGGTGATGG GTATATTAAAT
 TAGCCTGACT GTGGTTATAC ATTTTATCAA AATGTCACAC TGTGGCTGAG TNCAGAGGCT CATACCTATA ATCCCCANCA
 TTTTGGGGA GCT

SEQ ID NO:1023: (Length of Sequence = 379 Nucleotides)

TCAAGTCTCA AAACCTTTAAA AGACAGTAGA TATTGTGGT TTTCTAGCTA AATGAGGGCC AAGATTGGNC TTTTCAACT
 AAATGAATC ATGTAGTATA TCTGATTICA TAGCTTTCTG GGGGAAAAGG GAGGATTTGA ATTAGCAGCA GTGCAGGTCA
 GGAGCAGTAA AGAAGACAGT AGGAGGAGTC CAACTACAGA TGTGAATGAN CAGCCTCAGA GGAACACATG AGAAGGTGAC
 CTCTGTTTA TCAGGAAGGC GGGGCTTCT CTCTAAGATA CAAACCAAT AGGAATCGTC AAATAGTTCA AATTATCCGG
 GGGAAAAGC CTGAGCAATG ATCCCTCTGG AAAACAAAGC AGTTCTCAGG CAGCACCTT

SEQ ID NO:1024: (Length of Sequence = 320 Nucleotides)

AGTCTACAGG AACAAAGAAA TCTAAGATGG CTGCTCAGCC TTGAAATGTA CATGTTTTC AGCAAAGTTG TTGAAGAACC
 TTCCGTTGGC ACAGATTGTC CTTTTTCACA AGCATACAGA AGCCTCCTTC CGCCAGGNC TCTTCGGTTG CATCCTTGCA
 AATGGCTCCC ATTTGACACA TTCCTAAGTC TAAGAGATAC CCACTAGGGC AGCTTGTA CA GTTCTTGAAT CCTGGGCCAT
 TGCACGTCAA ACAACTGATA TCACATTTTT TTGCAGGATT TGTATCCATT CTCTGAAGAG TGGTCAAAGT AATAGCTGAT

SEQ ID NO:1025: (Length of Sequence = 368 Nucleotides)

TATTTAATCA TTCTTTTCTT TGCCGAAGA CTAAAACTA AGAAGATTAT TCGAATGGTG AATTAACTTG TTGAAGAGAC
 TATTCCAAAG GGATAGAATG AGACTAATTY CTGACTATGT TTTGCTAGTG ATGGGTGGAT GGGAAACAAAC ATTACAAGAA
 ATAGCATAAT GAATGTAGAA AATATTTTCTG TTGGGAGATG TGCATGANIT AGTTTCTTAG GTTTGCCACA ACAAGCATC
 CCAACTGGT GGCTTAAAA ACAGAAATTT GTTTCATGGT TCTTGAGCCT AGAAGGTCAA AATCAAGGTG TTGGCAGGAC
 CATGCTCTCT CTGAAACTCT AAGGGAGAAG CGTTCTTTGT TTCINCT

SEQ ID NO:1026: (Length of Sequence = 379 Nucleotides)

GGTGCAGGTG CATACAGGAA GGACCATGTG GGCTCAGAGC AAGGGGGCGG CCATCTCCTA GCCAAGGAGG GAGGGCTCCA
 GGGACCCCAA TCTGCTGGC ACCTAGGCTT TGAACCTCCA GCCTCCAGAC TGGGAGAAAA TAACGTCTCA TTGTTAAAGC
 CCCCAGCAAA TGANTACAGA ACCTAGGAAG GGGCAATGAA TGANTGATAG GTGGAAGGGC TAAGAAGAAA AGAGGAGGGA
 GAGGAAAGAG ACGTGCTCAG ATCTGTCTCT NCTGGACATC CGATCCCAGG CTGTCTCTTC AGTGGGNCCA AGTCCAACCTA
 CGATCAGCT CAGAAATAAT CCCINAGGCA TCGAAGCTTT CACAAAGGAG GNCACAAAA

SEQ ID NO:1027: (Length of Sequence = 411 Nucleotides)

GGCCTTGGCA CCTAGAAGCA GCCAGGAGG AAGTACTGAC CATTTAAAAG TGGCAGATCT CCGGGCCCCA TTTCTGCAGC
 CTTCAATCTG CAACTCCAGG GAGGGTATTT TTNAATTTGTG GGTTCAAAA ATCTGTATAT ACAGTCTATG TGTTTAGAAT
 TTGTGTTGTA AGTAAACTAC AGCTTTGAGT TGGAAAGAAG TCACGGGTG TAAAACCAAT TGGATTTTTT TAAAACAAAA
 GTATTAATAA TCTGGAAGAC AGINTTGCC AGGTCAGGAG TGTTTTCTTG GTGGTTCCAG CCCCATCAA TTGAAGTTT
 TCTGGGCTCA GTCAGACACA GACATTCATC TGTGTCTGAC CAAATCAGG GCTTTCCAC CTGTGGGGA GGGCACAGTT
 AGGATGTTTT T

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GAATAAACTG GTTGGGAACC AGAAAAGTAC AAAAAAGAAC AGCTAGAGGT ACATAGACAC AGGACAATTA ATCAATTTGG
GAAAAAAGAA AGNACTTACT TTCTCCATTG CTGCCTGAAT TGTTTCCCAA TCTGCCTTGA AATGCCACTT TTGGCCAATA
TTTTTNCAAA AATTGACCA AAAAGAAAA AGCACTNAAT TTCCCTTTTT ATACAAAAAT GNTAAGTAG GCAAGT

SEQ ID NO:1017: (Length of Sequence = 259 Nucleotides)

GCTTCCCTAG ATTTTCCCT AATTTTGGAC CTATGTGGAC AAAAAAATA ATCTAGTCCA AGCTTTCACT ACCTTCTTTT
TTTATTOGCC TTCTGCTTCT GNGTTCACA TGGGAACCTG AAGTGGTTTA TAAGAATGCC ATGCTGTGCA AATAGTAAAA
ATGAATTTNC TGATTTTAA AAAAGCCCTC AGGAACGGCA TATGTATANG GTATGTATAT GAAAAANGT GTTINAGGAAT
GCAGGAGGGA AACTAGGCG

SEQ ID NO:1018: (Length of Sequence = 354 Nucleotides)

CTGGAGGAGG AGAAGAAGCA TCTGGAGTTT ATGAATCAGC TAAAAAATA TGATGACGAC ATTTCCCAT CCGAGGACAA
AGACACTGAT TCTACCAAAG AGCCTCTGGA TGACCTTTTC CCCAATGATG AAGACGACCC AGGGCAAGGA ATCCAGCAGC
AGCACAGCAG TGCAGCOGCG GCTNCCAGC AGGGCGGCTA CGAGATCCCC GCGCGCTGC GGACGCTCCA CAACCTGGTG
ATCCAGTACG NCTGCGAGG GCGCTACGAG GTAGCTGTGC CCCNINCAA GCAGGCCCTG GAGGACCTGG AGAAGACTTC
AGGACACGAC CCACCGGAC GTGGCCACCA TGCT

SEQ ID NO:1019: (Length of Sequence = 393 Nucleotides)

GATGACCGAT TTGGCCATGG AAGACTTATC TTCATGGCAC AGAGAGNYTG TSCAGAGATG AGTCAGACTC AGGGGCTGAG
TAACAGCAGA GCAGAGAGTG CAGAAGTGA CGCTCAGAAG CGAGTTTATG TGTGTFTTY CCTCTATCTG CTGGCTGTGG
CTGGTACTGC AACCTATCCC AAAGTAACAG CCTAGTCAAT GAGGTATATG CTTGAGATCT GGCAAACCTC CTCTGCACAT
AAAACGTGTA TTCTTAGTTC TCTGAAAGAC CCCACATCT TTGAAGTGTA AACTAAGAGC TACATTTTCC CTTTACTAC
ATCTCCCTTA AAAGGAAAGC ACTACAAGAG CTTTAAATA GCAAGCTTCC CTATTCTAAG GGGAAANAGT CTT

SEQ ID NO:1020: (Length of Sequence = 403 Nucleotides)

CTGAGGAAGA GAGGTGAAGT GGCATCTACC CAAACACCT GTGTACTGGT TAATAAGGTC GGTAGTTCCC ATTAATGAGC
TTGATGAAGG ATGGCACCTG ACAGGGCCTT AAATGANCTG ATGGAGTGAA TGTNACCACT GTGAATTAAA TTNCTTTAT
ATATAATAAA TAGCTGTGCT TACACATTTT CAGATTINCT TTGTGAGCTA TGGACATGGA ACAGCGGGAC TATGATTCTA
GAACAGCACT CCATGTAGCT GCTGAGAGG GTAATACAGG AACTACTCCT ATCTATTTC TTTCCAGATT TAATTTCTAC
TTAGTACTAA AATCTGCTCT TTTTITGGGG GTGGGACGGT ATAGGTCATG TTGAAGTTGT TAAATTTTTT NCTGGAAGCC
TGC

SEQ ID NO:1021: (Length of Sequence = 452 Nucleotides)

ATCGCAACCT GGCAGGGGTG TGGGGTTTGC TGGGGGCCCT TGTTGGGCCA TGATCTGAGG AGGGTATGTG GGGGGCGGGA
GCTCAGCACA TTCCATGGCC TAGAGGGGCC ACACAGAGGC CCCAGTGGGA CCCATGGCGT GGAGGCAGGT ATGGGGAGTT
KTGGGGAGAT CCCAGGGTGG TCTGGGGCCT GGAACCGGCC ATTKGGAGGC CCCAGCAGTT TCAKTGCCCA GGGCCTCCCT
GCAGAGCCAT GCATGGCAGA AGAAGTGTGT AGCATGAGCT GGTACAGCC CATGCCCATC AAGAAAGGCA GTGTGGTCAT
GCGTKTGAC ATCAGCAGCA ATGGCCTGGG GACCTTCATT CCAGATAAAA GGTTCAGAT GATATCAACG GCTTCCTGAA
GAGAGACCGG GGCAATAACA TCCATTCAAT TGGGAGAGGA GGTGAGGGAT NT

SEQ ID NO:1022: (Length of Sequence = 413 Nucleotides)

272

GATAGCAGCA ACATACGTTT GTTTATTCAT TTGCTTACTT ACAACAAACG TTTATTCATT ATTTATAATG CAACAAGCAT
TAACCTAGGT GCTAAGGAGA GAAAAATGAG TAAGACACAG TTTCTTTCCT CAAGGAAATC ACAGTCTGTT GGCAGAGATA
AGTAGTAATG GTGCCTAATA TAGGTAACAC TTGCTACCTG CTCCAAGAAC AAAGTTAAGC AAGTGATTAA GTTAAGCAAT
GCTTAGAGGT AGAGGATGTA AGANTGGCCT TAAAAAATGT GTCTTCTGAG ATGAG

SEQ ID NO:1010: (Length of Sequence = 356 Nucleotides)

GTATTCCTC ATTTGTGCAA ATNAAATAGA AAAGGTAAAT NAGAACTCA AGAGGTTTGT TACCTACTGT CAATGGAGTG
GGGAAATGG GTGGAAAGAA GAAGGCAATA AGAAAGAGT AACAGGAAAC GACAGTNGAC ACTTCTGAGT ATACCTTGTG
GAATCTCTTT CACTCTTAGA ATCATAGTAA TAGANGANGA AAAAGAAGT CCCCAACTG AAAAGGATAG ACCACTGGAA
CAACTTCAAG TGGTCTAATG TAGAAGCAA TGGAGTCCCT CAAGGAAAGA AGAGAGGTTT TGAAAAGAAA AAACATTTG
AAGAGTTAAC AGCGAAACAC TTTCCAACT TAAAG

SEQ ID NO:1011: (Length of Sequence = 315 Nucleotides)

AGAGAGACAC AACTGTAAATA GAGACACAGA GGAGTGGCAC ACAGAGACCA CCTCCAGCT GGAGACAGTC AGGAAGGACT
GAGGGAGAGG GGACAGCCAG GGCTCCACAC CCAGGCAAGA ATGGGGGAGG GCCTGTGGAA CAGAGAAGTC ATCAACACAC
ACAGTTCAA GTCTACCTTA GGCTAGGAGG GGGAGCAGGA AGAAGGGGCA GGGACGCAGG GGCCCGGCCT GGNAGCTCCC
TGTGGGCTC TNCCTGCCCC TGCTGGCTCC CNGTGGGGTG CTCAGGCAGG AAGAGAGGAG GCTGCTGTTT TTAGG

SEQ ID NO:1012: (Length of Sequence = 272 Nucleotides)

CCCAACTCTA TAGCCCTAGT CAACCACTAA TCTATACCCT GINTCTATA GATTGCTTA GTCTAGAAAT TTGTATAAA
TGAAATGCAT GCACGTGAAC TTTTGTATC TGGCTTGCCT TTCCATTAG CATAAAGTTT TAAAGGTCCN CATATGTTGC
TGCAATGTG CATTTCTTTT TGTGNACTGC NATATTACAT TGTATGGGAT ATACCATTTT GCCATATTN GTTAAATCCA
TTCATCCAGT TGGTGGGACA GCAGTTATT TC

SEQ ID NO:1013: (Length of Sequence = 252 Nucleotides)

TTTGTAGTG TTTTCTACAC TACACTCAAG TTCATTGAGC ATGTCATTTT AACACATGT GACGTGTCAA CTTCAAAAAT
TAAACAAACC AGCNAAACAC AACACTTGNC ACTACAAAGG AACTGTGTTT ATTCTCAACC TTCTATGATA GCTAAACTTC
TCTGNAATTT NGTTCCCCCA CACATCCAC ATCTGGGCTC AATTCCAGC TTCGTGTTT CTGTTTATT TCATCCAAA
TGTTATTTTA AT

SEQ ID NO:1014: (Length of Sequence = 210 Nucleotides)

GGGATACACT GACAGTAATG TGAAGGCCA CACTGCGAGA TTTGAGGCCC AGCAGGTCTT GGNCAAGTGC CATTCACCCC
GGAACTTTTA ACCCAAGCGG TGGGAAGGA AAGCCAAAAC TCCAAGCTGG CACTTTTTTG GGGTCTGGG CCATGACACT
TCTTAGGCCT TCTGCTGCTG AACTTTTACA GGGACAAAAG GTACCCACG

SEQ ID NO:1015: (Length of Sequence = 222 Nucleotides)

GGNAAGAAAG GTTCTCAGA GGACAGCCTT ATTAATTTCT CAGAGGATGA ATTTGNACAA TGGCAGCAGC TTGCAGTCAC
AACTTCTTAA GGTGCTTCAG AGGCTGATTG TTCTAGNAA CACAGAGTAA TGAATATTCT CTGAAGAGCA ATGAAACAGG
TTTGAATTT TTTGTATCT GNACTTAGNA ACACATCAGT CCCATCAAC CCATGGACTT CT

SEQ ID NO:1016: (Length of Sequence = 236 Nucleotides)

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CCIGTTTCCC AATGCTACC CTCCTCTTC TCCTTTCTC TTCTCTTTC CTAGAGAAAT CCTGCTTCC TTTCCTTCC
CAGAGGCAAC TGGCATTATA AT

SEQ ID NO:1003: (Length of Sequence = 267 Nucleotides)

GGAAAGAGGA GCAGGTCTGG AGGTTTGTTG AACCCAGTCC CCTGCAGAAT CTGTAAAACC TAATAAATCA TGGTTGTGGC
CATTCTCAGC GTGGTGATTG TAATTAGACG ACCCCCGGGA AGCCACAGCA CTCGGGGCCT GGAGTTCCTC CCCCTGCCGT
ACCTAGAAGC AGAACGTTT TCAGCCTCT GCCCCTGTGG CTTTAAGGCT TTGTCTTAAT TTAAGGAAAA AGATCCTCCC
GGGTTTATT TCCTCTTTC TTGAGTG

SEQ ID NO:1004: (Length of Sequence = 277 Nucleotides)

GGCTCCTAAA CACTTTCCTC CTGAGATGTT AAGCAAAGTA ATCATCCTGT CACTAGATAG AAGCGATGAA GATAAAGAAA
AAGCAAGTNC TTGATCAGT TTACTCAAAC AGGAAGGGAT AGCCACAAGT GACAACTTCA TGCAGGCTTT CCTGAATGTN
TTGGACCACT GTCCCAAAC TGAGGTGAC ATCCCTTTGG TGAAATCCTA TTTCGACAG TTTGCAGCTC GTGCCATCAT
TTCAGAGCTN GGTGAGCATT TCAGAACTAG CTCACC

SEQ ID NO:1005: (Length of Sequence = 271 Nucleotides)

GTAGGTCAT TCACACATGG TGGAGACAGG AATCTACAGA CTAGGGATCA GCCCAAGGC TATGATCTTT GTNCTGCGCC
GCTCTACCCC TGAGCAGACG GGCCAGAGGT CCAGAGAGGG CTGTCTGGC AGAGTTCATA CTTTGATAAC TGAACCCTAG
AGTAAGCCTG CCCTGGGAAA TNCCAGCTCA AGGGACTGAC AGGCATAATG CTCCTTGGGA GAGAAATGCC ACATCTGCAG
CGACACGAT CCTTAACACT GTCCAGGAC T

SEQ ID NO:1006: (Length of Sequence = 336 Nucleotides)

TATTTTNCAG ATATGGATAA AAATTGCTTA GGAGAGTAAA GAGAGACAAA GTTGAAAGCA GGTTTATAGT AGGTTTGTT
TTAGTGTTGA TCCCTTTTGG CTCGAATAAT CAAAGTGATA AATATTGAAA ATTGATTCAT GCAGCATTAC TTACTCCATT
CTAATTTTNA TATATGTCAA AAGTGCCATC TCCCAAACCTG TGCTATCCCC TTCAGGAGAA GAGACTCTGC TGAAGTTTAT
AAGGTTGACA TATTGCCAGC TTCAATAATG TAAAGATGAA GTGTATACTG GAATTCCTAA TGCAAATAAC AACTCTTTTG
GGAAGTAACC CCGTTT

SEQ ID NO:1007: (Length of Sequence = 355 Nucleotides)

GGCAAGAAGG CGTCGGCGGC GCANTGCGGA TCCAGAAGGA CATAAAGGC AGCTTGTTCC TCCAGGCTGG TGGGCTTNGT
GCCCTCGGCC TTGGGATGCT TATCAGATC CTTTGGGACC AGAACACTGG ATATCAGTNC AGCCTCTGGG CCAGCTTCAG
AGGCTGTAG AGCATCATG CTGCTGTGGC TGATGCTCC TTCTCTCAGT AAATCACAAA AGTGTGTGTTGCCATCCAGG
TTACOGAGTG ACTTAATTT CAGAAAATTT AATATTGAGG TCATTATTGT ATGCATTTTC ACTGTTGCCA TTTTGTATC
CTGTAGGTA GGTCTATGAA GTACCACTGG GGTCA

SEQ ID NO:1008: (Length of Sequence = 269 Nucleotides)

ATATTTAAAG AGAGCTTTGG TCAGTAAAAG TATAAANCT GAGCTTTGGT AAGGGTACAG TTTATAAGGC CTAGAGAACA
TCAAAACATT CATTCATAT TGAATGTATA AATACCACA TGTGAGAGCA CATGTTGATT CAGTTTGAAT ATGTCTGCCCT
TGIGGNTCTT TAAAACCTT CCAGCCCTGG TTATTTTCCC AAGCTTCTT TATAATTACA CCAGGGAAAG AGTTACCTGG
NATTAATCAA AACCAGACAG TGGACAATG

SEQ ID NO:1009: (Length of Sequence = 295 Nucleotides)

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SEQ ID NO:996: (Length of Sequence = 307 Nucleotides)

GTGCGCCAAC TGCAAGAAGG AGGCCATCTT TTA CTGCTGT TGGAAACCA GCTACTGINA CTACCCCTGC CAGCAAGCCC
 ACTGGCCTGA GCACATGAAG TCCTGCACCC AGTCAGCTAC TGCTCTCAG CAGGAAGCGG ATGCTGAGGT GAACACAGAA
 AACTAAATA AGTCCTCCCA GGGGAGCTCC TCGAGCACAC AATCAGCACC TTCAGAAACG GCCAGCGCCT CCAAAGAGAA
 GGAGACGTCA GCTGAGAAAA GCAAGGAGAG TGGCTCGACC CTTGACCTTT CTGGCTCCAG AGAGACG

SEQ ID NO:997: (Length of Sequence = 402 Nucleotides)

TCTGCACCTA ATACTGAGGG TGTGAAATCT TCCTCAGTAA TGCCAGCCC TAGTACCACA TTAGCGCGGC AAGGCAGTCT
 GGAGTCACCG TGTCCGGTA CGNGCAGCAT GGGCAGTGCT GGTGGGCTAA GCGGCANAGC AGCCCTCTCT TCAATAAACC
 CTCAGACTTA ACTACAGATG TTATAAGCTT AAGTCACTCG TTGGCCTCCA GCCCAGCATC GGTTCAGTCT TTCACATCAG
 GTGGTCTCGT GTGGGCTGCC AATATGAGCA GTTCCTCTGC AGGCAGCAAG GATACTCCGA GCTACCAAGT CATGACTAGC
 CTCACACGA GCTTCTGAGT CCATTGACCT CCCCCTCAGC CATCATGGCT CCTTTGINTT GGACTGACCA CAGGCACTCA
 CG

SEQ ID NO:998: (Length of Sequence = 304 Nucleotides)

GCAGCTGT GATTGINAAG ACTCACAACC ATGTGGAGAG GCCGAATCAC GCAGGAGAGC CACGCATTGG AGTACCCTGG
 CTCCAGCCC CTCCCCACC CCGTNTTGG CCAGAGAGCT ACAAGCAGGA ATCCAGTGC AGCTGCAAT NATGGCCATC
 GAGGAAGTCT GTGGAGAAGA GGCTGGGGGC TGTGGTGCTG AGGGGGGCTA GGCTCAGCAC GGGACCACCT GACGACAGCT
 CCCAGCCAGT CCATGCTGTC CAGGTGGCCA TCAAGCCAGG TTCCAGGGCC CATGGGTGCT TGCT

SEQ ID NO:999: (Length of Sequence = 321 Nucleotides)

AGATGGTTT TGGAGCTCGA NATCTTCATG GGTTAGACTT GCTGGTCAGA CCCAGGAGCA CCTGTGGCTC ACACCTTCTG
 TNCCCTCCT GGCTGTGCA GAATGTAAAC AGCAGACTCA TACTCAATGG GCACTACAGG CCTTATCAGA CGTTTTATAC
 AAGCCTGGAT TGCTTAGTAG GGAATAAGG CATTCTCTGA GGGGGCTTTC CACTTAGATT GAGAATTTTA TTGAAAAGA
 ATCTGGTTTA AATGGCATTG TGGTCCGAGG TAGCTGCTCT CCCCAGTGA AGCTGAGCCG AAATATAAGA ATAATATATT
 T

SEQ ID NO:1000: (Length of Sequence = 253 Nucleotides)

CCCTAGAGGA TTGCGGTCT TINATCTGCC AGTGACCTGA ACCACGAGA TTTTCAAGC AGGAGGGCCG ATTGGGCAAC
 CACAGCTCCC GTGCTCTCTC TTTCAGTGC GCGGCTTTC CTCGAGAAG GACTTTGAGG ACTACATTAG GTACGACAAC
 TGCTCGTCCA GCGTCTGGC CGCGTGGTC TTCGAGCACC CCTTCAACCA CAGCAAGGAG CCCCTGCCGN TGGCGGTGAG
 ACGTGGGCC GGG

SEQ ID NO:1001: (Length of Sequence = 164 Nucleotides)

AAACAGAGTA CTGGATGTC ACTGTTGGAA AGTGCTCACA ATTTCTCATC TAAGCGAAG TTGTCTGINC TCCTTCTAC
 CTTACAGTT TCTACTGCC TGAAGGCAGC TGCCAAAACC CCTCTAAGCA AGCAGCACTC TTACCCACCA AAATCTATGA
 CCTC

SEQ ID NO:1002: (Length of Sequence = 262 Nucleotides)

ATATCTTCTT GAGGAAAGT GGTAGAGTTA AAGAGGGCAT AGAGAGCGCA CTCATGCATT TACAACCTCAG AATTTTAAAA
 AAAGTTTACA TTTTGTCAAT TGTACTTCAG ATGAATTINC TTATTAAAG AAATAAGGCC ACAGAGGTAA ACTTAAGTCT

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AACATGAATG ATACCATTTT GCAGCAGCAT TGTAGATTTG TAGTATTTTA GATTGGTATC ACAGTGCACC TGAAAAGTAA
 GTTTCATTTT ACTTTTTTNA TTGTTGTTGA GACGGAGCTC ACTTTTGTCA CCCAGGCTGG AGTGCAGTGG TGTGATCTTG
 GCTCATGGCA GCCTCTGCCT CGCTGGGTTT AAGCGATTCT CTTGCCCTAG CCTCCCGAGT AGCTAGGACT ATAGATGCTC
 GCCACCATGC CCAGCTAATT T

SEQ ID NO:991: (Length of Sequence = 351 Nucleotides)

CCTCACTCCC CGCGCTGGCA CCTCAGGTTT ACAAGAAGAA CTAGGAAATA ATGCCGGCCA CGCGACCCCT GGAGAGGGGG
 COGGCTAGAA CAGCGTTCCT AAGAATCCGC GCCACAGCAG GTCCCGGAT GTTGGGGCCT TAGTGTATC GAGCTAGCCC
 CAATCCTCAA CCGATCTTC AACTTCTGGT AGTCTAACA GAAGTCTCGT ATTGAACCAG CCACINTGGC CAGGGAGAAG
 TAATCCTCTG ATAGTTGAGG TTCTTNTCT TCCTCTGGAG CAGATAGTGG TGTCTCCTCC CCACAAAGCT CATGTTCTGC
 TGGAGAAAT GGAGATGGCG CCTTGAAGG C

SEQ ID NO:992: (Length of Sequence = 406 Nucleotides)

CCAGAAAAA TGGCCACTAC TACCCTTGG CTCAGAAATG CTAGTCTTTA TTINCTGAAA TGTTTTATAT AGAAAAAATT
 TAATAATAAA TAGACATTCT TATATATTTT CTACCATTT NAGATTGGGT TAAAAAGTAT GNGACTTCC GCGGGGTGC
 GGTGATTCAA GCCTGCAATC CCAGCACTTT GGGAGGCGA GGCAGACAGA TCATGAGGTC GGGATCTGTG GCTAACACAG
 TGAAACCCCG TCTCTATTAA AANTACAAA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGCCACCG
 CGGTGGAGCT CCAGCTTTTG TTCCCTTTAA GTGAGGGGT AATTTGAGC TTGGGTAAA TCATGGTCAT AGCTGTTTCC
 CGTGTG

SEQ ID NO:993: (Length of Sequence = 381 Nucleotides)

ATGGAAGGAC CGTCCGGGA CCCCAACGAG GCANTGCGG AGTTTGCAA GGAAATTGAC ATCTCTGTG TCAAAATTGA
 GCAGGTGATC GGAGCAGGG AGTTTNGCA GGTCTGCAGT GGCACCTGA AGCTGCCAGG CAAGAGAGAG ATCTTTNTGG
 CCATCAAGAC GCTCAAGTCG GGTACACGG AGAAGCAGCG CCGGGACTTC CTGAGCGAAG CTCCATCATG GCCAGTTCTG
 ACCATCCCAA CGTCATCCAC CTGGAGGGTG TGTGACCAA GAGCACCT GTNATGATCA TCACCGAGTT CATTGAGAAT
 GGCINCTGG GACTCCCTTT CTCCGGCAA AACGATGGG AGTTTCACAG TTCATCCAGC T

SEQ ID NO:994: (Length of Sequence = 384 Nucleotides)

GTTCCTCCAG TCGGAAGGA TAAATCAA TTCCACTTT CTGGGGTGA TGCCCAAAC CTTCACAACT CAAGTGTCT
 CCAAGTGCAA ATGTCAAAT GGGAGGAGGA AAGGGTTTAA AAATTAGAGA AAATGTATG CACTTACGGA CTAAAAATC
 CGAAAAACAT AGTAAAAAGA CAAAAACA TAGCATTATG CTCTGAAATC ACAACCAAAG CCAAAATAAA AGGGACATTT
 TTCACCTAAA CTACCTAGAG GGATTTTTTG TTAGTTTTT CTTTTTCTT TTTTTTTTCA TTTCCAGTT AAGTCTATG
 TCTTTTGA AATCCAATA CTAACTGC AAGTCTGCAA TGTCTCTGA AGTCAGTGAA ATTA

SEQ ID NO:995: (Length of Sequence = 386 Nucleotides)

ATAACTTTAA CAGAGGATTG GAATAATGAG GGATTGGCAA GGAAGCAGTA AAAGGGAACA CTAAAGTATA GAATAATAGC
 AAACAGAAGG AGCACCTAC CCTAGGGCT GAGAAAGAGC ACAGGGAAGT CTTTTTTTNT TCCTGGACAG AGATCCAGAC
 GAGCTGGAGA AAGAAGTTGC TATGGTACTG CATCANTGGA ACTTGCTGGA AATCCACCT CAAGGGCACT AGGAAAACCT
 GTTCAGGGGA GCTGTGGAGG GAAATGGGGT TGGCAGGAAA GCTGCTGGC GCGGGTGCT TCAGACTGCA GTGTATTGCA
 GGAGCTTGGG CACTGGGGAA GCTGTGTGCA CTGAGGATC CTGCTGAGCC AGCACATCAG ATCAGG

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AAAAAAAAA GGAATGGCC AGGTGCGGTG GCTCAGGACG GGTCTGGTGG CTCACACCTG TAATCTTTCT TAAAACGTTA
TGAAGTTC

SEQ ID NO:985: (Length of Sequence = 439 Nucleotides)

TGGTATACTT TTGINTTTTT TTCTACTTGT TAGTTGTATT AGTATCAAAT GGCATAATAA AGTTACTTTG TTTGCCATTT
CCCACTCATC TGAAAATCAC AAAAAGCATT TATTTCTAAG ATTTATATCC ACTGACCTTT TCCCCAAAGT TATTTTCCTG
TTACTTGTAT TTCATCTTTG CCCTTATTTT TTTAATATTT GTATTAGAAT TAGCTTGCTC TTGTTTCCTT CACGGCAAAT
GTGTACATT GCCCACTGGG TGGCTTCTGC GGATGCCCCCT ACCCACCCTT CGTCTGGAGC AGAGAAGTCC TGTTAGCCTA
GCAGCATAGT GGCTGCTGTC AGTGGGAGGA GTGTGCTTTC TCTAGCATGG TCTGTGATGT CATCTGGACA TAATTAATTA
GACTAATCCG AATAGAGGAC CAAGACAGCC CTGCTTGGC

SEQ ID NO:986: (Length of Sequence = 286 Nucleotides)

CGCGACGAA CATGGAGAT CCAGCTTG GAGCGCAAGT CCTCCTGCGG GAAGAAGTGT CGCGGCTCCA GGAGGAAGTT
CACCTTCTCC GGCAGATC AGATGTTG GCGAAGGACC TGGAGGAGTC GCAGGGCGGC AAGTCTCTCN AGTCTCTCTC
GGCCACCGAG CTCAGGGT CTGGCCCA GAAGGAGCAG GAGCTAGCCA GAGCCAAAGA AGCCTTNCAG GCCATGAAAG
CTGATCGGAA GCGCTTAT CCGAGAAGA CAGACCTGGT GAGCCA

SEQ ID NO:987: (Length of Sequence = 381 Nucleotides)

TCCAAAGGTT TTCATCTG TTGGATAA ACAAAC TG GTACATCTAC ACFATGGAAT TTGGGA GATGAAACAG
AATGINTGAG GGCCAC CATGTAT GGTC TG GTCTGCTCC CA TTTCCA CAGGCA G TGTGCT
GGGTGAGGGG CTGGGAGC GGCAGGAG CATC AACAC AAGGGTGGAA GCGAAGA CGACCAG TTTGAGGGT
GTNTCACATG GTACAACCAA GAGACTTGGC GTGCTAGAA CCAAGGAAAC ACTCAGGACA CACGACAT CTGCAGGGAA
CCTGGGGGGT GGTGAGGAAA GTCTGTCACG GGTGTTTGGG GGGAGACTTG GAGGCCCTC T

SEQ ID NO:988: (Length of Sequence = 381 Nucleotides)

GAATTAATAC CAATAGAAGG GCAATGCTTT TAGATTAAAA TGAAGGTGAC TTAAACAGCT TAAAGTTAG TTTAAAAGTT
GTAGGTGATT AAAATAATTT GAAGGCGATC TTTTAAAAG AGATTAANCC GAAGTGANIT AAAAGACCTT GAAATCCATG
ACGCAGGGAG AATTGCGTCA TTTAAAGCCT AGTTAACGCA TTTTCTAAAC GCAGACGAAA ATGGAAAGAT TAATTGGGAG
TGGTAGGATG AAACAATTTG GAGAAGATAG AAGTTTGAAG TGGAAAACCTG GAAGACAGAA GTACGGGANG GCCTCCTTCA
TGTTTACAAT TTTAATTAAT TTTTPTTATT TTAGNGTAA TTTCTTACCA AACATTACCC A

SEQ ID NO:989: (Length of Sequence = 432 Nucleotides)

GTCITGGGCT CTGCAACCT CTGCTCCTG GGTTCAGCG ATTCCCTGCT CTTAGTACC CAAGTAGCTA AGAT 3
CATGCGCGCT CTGCTGGC TAATATATAT ATATATTTTT NGTAGTTTTA GTAGAACGG GGTTCACCA CGTC 3
GCTGGTCTCG AACTCCAGAC CTCAAATGAT CTGCCCGCCT TGGCTTCCCA AAGTCTGGG ATTACAGGCA TTAGCCACTG
TGCTTGGCCA ACAATATATA TTAATAAGC ACACATACAA CAAAAGTAGG TGTGGTAAAG CTTACAAAAA TGTGACCAGT
AGCTTGCTGA AACCTAACTT TTTATTTGTT CATGGAACCT TCTAGACCGT AACTACACTG AATAATGAGA ATCTGCTGTA
ATCTTTTTTA GGTGCTGTAG ATGAGCCATT GG

SEQ ID NO:990: (Length of Sequence = 421 Nucleotides)

GGCAGCCCTA CTTTINCTTC TCATTAGCAG TTTCACTCCA CAGCTGGGGT ATTAAATTG TNAGTCATTG AAATTAATCC
CTGACTGAAT TGGAAAGGAA TTGTATTTGC AGTATTTGGA TTTATTTATT TTNCAGGTAT GGAATCTGG TGATTTTGAA

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TTTAACCATTT TTTTNTTCCC TTAAAAAAA AAAACCCAAA AAACCAAATC CCAATAAATA TGTTATTTTT NTCCATCACA
ATATTGCTTT AGAAAAATAA GAGCGTCAA GCAGCAATTT TTCCT

SEQ ID NO:979: (Length of Sequence = 316 Nucleotides)

GTGCGTNCAC ACTCTCCTCC TGCTCCCCAA ACTCCTCATC ATTGAAGCOG AAGTGGTCAA TGAAGGCAGA GGTCA TGCGC
TGCATCTGGA AGTCCATGAA GGCCTGCTGC AGCACAGCCT CCTCAGGGAA GTTGAAC TCC TTGAGCCGGT CGTCTCATC
GTCAC TGGAG GAGTGTAGGT GGTGGGTGTT CACCAGGTCC ACCATGTTCT TCTTGTTGGT CTCGCCAGG GGGCCGATA
CGAAGGCTTC CCACTGCTCC TGCTGCTCGC TGGGCAGCTC CTTCAGCAGC TTGCCGCAGC TGCTCTGCAA TTGGGG

SEQ ID NO:980: (Length of Sequence = 386 Nucleotides)

AAACTGGCTT GCCTTCATCA TCTCTGCAGG GNTCAGTAAA GATTAGAAAT GGATTATTTA CCTTGTTATA CAAATACACC
TCCTCCCTAC ACCCAAGANT TGAGAGGAAG ATGAGCTGTT CCTGTGTTAA CGCCTGANTC AATCCCATTA TCTGCATTTT
TGTTGTGGT TAGCGCTCCA GCAGCCTAAG GCGGGAGCTG GAAATGACAG CCTTGGAGAC GAGGAAGGCT CCAGGGAGGA
CGGAGAGGAA CACCTGCTGA AGAATAAGAC GGGCGGCACC AGCCGGGCTG ATTTTGGGGA ACGGAAGGTA ACAGAGGGTG
ATGCTTCTAA TCGCTTTTAC AAGGCTTGG AAAGACGGGA TNGCCTTAAC CAACTTGGGG TTTCTT

SEQ ID NO:981: (Length of Sequence = 322 Nucleotides)

GTTTATTAAAT ATTTAAACAT ATTAAAATAA TACATGTCNA TAATGAAAT GAAACATTAC AAATAAATAC ACAGGAAAGG
CAGTATTCCC CTTCCAGTTC CACTCTTGAA ATAACCAGTT AACAAGATGA TGAACATCTT TCCATGATGT TCTCCAAGAT
TCATATTATT TTTGCAATCA TACAATGGCA TATACAGCTC AGGTGCGGTG GCTCACGCAA GTAAATCCCA GCATTTTGGG
AGGCTGAGGC GGGTGGTTCA CTTGAGATCA AGAGTTGAG GCCAGCCTGA CCAACATGAA GAAACCTGT CTCTTACTAA
AA

SEQ ID NO:982: (Length of Sequence = 305 Nucleotides)

CCCAAGGCTG TAGTTCA GCA TCAACAGGGC AGGGAGCTTG GCAGGGCAAG GGCAGAGCTG GAGATCATGC CCAGTNTTCC
AGGTGCCCTC CCTCCCAATC AGCCTGGGGG GCACAGGACA GGGATGGAGA AGGGGCTCTC TCCATGGCTT GGGTAACATG
CCAAAGGCAG GTCATAGGGC AGACTCAGTG GGGGTGGGGG CCTGGCTAAC AAGCAATGGA GAGAACGGGG GCCATCCAGA
GAGGTGGCA GAAGAGAGCC CCTGGGTCAA GAGAAAACCT TGGGGAAGAC AAGACACGGG AGAAG

SEQ ID NO:983: (Length of Sequence = 399 Nucleotides)

AGCCCTTGTT TTGTTTTTAA AAGCTGTGCT GTTACTGCTT AAAGTCTCCA AACTGTTATT GAGAACACTG ACCAGAGCCC
TGTCCATAGA CCAGTGT TTT TCCAAGTGCA GATTGCAACT CCTTTCAGA GTAGGTTGTG GAGCCATTIN AGCTGACTAC
TCACCAGCTT TCTTCAAAT GTAAATGGAA TAGGATAGAA AAATAATGAA AAATTGTAAA GTGAATTGGA TGCAAAAAGG
GTAAATATTG TNGTGTGAGA CTTTTTGGG TGAGTGTGCA TGTGTTTACA TACTGENTCA CATTATAACA TGTATTGCTC
ATTATGGGTT GTGGTCAGAA AAAATTCAGN AAACGCTGTC TCAGACTGTC CCCAAGTTGT ATTTGCTTAT AATGGGACT

SEQ ID NO:984: (Length of Sequence = 408 Nucleotides)

GTGGTATGAG GTATCAATGA AATACATTTA AGATGTACAT TGGTTTGT TTT CAGAAAGGCG AGACAAGTCA AAGCGGGGAC
TTCCAGGCTA TAGGTAAATT TATACATTTT CTGGTTAAGA TTGGTTGAGT TTGTCTAAGG ACCTGGGATC AACAGAGAGG
AAATGTTTGG NITAAGACAA GGATTGTGGA GACCAAAGTT TTA CTACGCA GAGGAAGCTC TTAGCTAGCA GGCATAAGAC
AGAAGAGGCT GTAAATGTT TTCTTATGAG ACTGAAAAGG GTGCCTGACT CTTAATTGAT TATCTCCTGG NTCTGGAAAG

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TGCAGACTGA CACAAACACC ATTCAGAACA AGAGAGAGGA GTGTGAAGTG CTTCTCAGCT GGGCTCAAGA CCACTTCTTT
 CCACTGCTGG AAAGAGGGGC TGCATGCACT GTAGGAAAAG CGTGTCTCTG AACTGCCACA GGGTGTCTC GAAAGGGCAG
 CCGGTCTTG ATGCCACTTC TCCATGGCTC CTGTTTTTGG GGGAGCTCCA AACAAAGTGA GAGAAGCTGC CTATTT

SEQ ID NO:973: (Length of Sequence = 401 Nucleotides)

TTCTCAAAC TCCAGTTCTC TTCTGGGCC AAGATCTGGT CCACCACTGC CGTGGCCTCC TTCCCTGGC GGATGTC TC
 COGCTCTGA GCAGAGAAAC TTTCTTCCC AGCAACTTCT TCATCTGATG GGAGGAGGA ACTGAATAGC TTTCCCTGA
 GGGAGATAAG AAAGAAGAGT GTGGTGTGAA CAGGGAGCTT TGAGCTGTGG AGTTGGGCTG GGCATGGAAA ATNCGGAGGA
 GAGTAGCAAG GAATGAGGGG CTTGAGAGAA CTCTNGGATC AGCCCTCCCA CACTCACTGC CCTTTAAGGT ATCTTTGGGG
 AAAAAGGG GCTTCTATGA TGAGTCTGGC AGCTNCCCAC ACTGCATTCT CCTCTGCAT TTTTTTACCA TGCACCAGGG
 C

SEQ ID NO:974: (Length of Sequence = 371 Nucleotides)

TTTACAAATG AACCACTGAG CACCTCAGTA CTTAGCTCAT ACCTCATACC TTAGTTCCTT AGTACTTAGC CTTGTGCCAT
 CTTGAATGAG ATGGAGTGAA GTGAAGCTCG AAGGAGTGAC AGAGACATAG TCCTTGCTCT CAAGGGGTCT TTAGCCTGGT
 CTGGGGGACA AGATTTCTCT ATCTACCTCT TGAAAGGTGG CAGGACAACT CCACACTGGA GTGTTCTCAC CAGCAGATAG
 GTGCTGCGGG AGTGTGGGCG CACATTCTTT ATAGCCACAG GCTTTCTGGG GACTTNCCT GGGTCTCTC CCTATTGGC
 TGGGTGGACC ATAAGCGGCA AGTGAATGTG GCAAACCTCA ATTCACAATT AA

SEQ ID NO:975: (Length of Sequence = 340 Nucleotides)

GACAACAGAA AAAGAAGTGG ACAGCTACCC TAGATTCTAG CTCACACATA ATTCAGCCAG ATAATCATCA TTAAATAAT
 ACCCCTTGAA ATTTTTCAGA CTTTTCACAG CTCTAAAAC ACAACATCAG ACATAACATC ACACATTTGT TCCAAAGGAC
 TAAAAATCAA AAGCAATTGC AAAGTATTGG GAATCACTTT TATGGCTTTC CTAAGGGACA GTCCCATCT TCCAAGGAG
 TGTTTTTAAA GAAGCACTAA CTCTGGTAGG TTATCAAAC ATTTTTTAT TCTAAATAAA TAAAGACTA ACTGAAGGTC
 TCAGGTGCAC ACTTATTTTT

SEQ ID NO:976: (Length of Sequence = 343 Nucleotides)

CTGTTCCCTA AATATTATTA AATTTTAAA AATTAGACAT TTGGTCTAAA TTAGACAGGT AAGATACTAC TGTCTTACT
 AGATGCTTTA AAGTCATAAA CTGCTCTAT GGCTTTTAT AATTGTCNAA CTTGCTTGT TTAGAGCCAT TGGATTCTAG
 GTAAGGCCTA GAGACATTG GAGTAGCCA TGTCCTTAG CTATGCTAGA AAGAGTCCGA CATTATCTGT GGTCTGTCC
 TGTATCTTAC ACTCTACACC TGATACATAA TTAAAATTAC TTACACTAAA AATAAAAATG GATGCATTTT TTAGGTAGGA
 AGGGTATGG AAATTATAGG TTT

SEQ ID NO:977: (Length of Sequence = 265 Nucleotides)

ATCTTTGTAA TATCAGTGCC TAGACTAAGC CTGGCGTATA ATAGGCACTC AGAGATTGA AGAATAAATG ACTAAATGAC
 TGTATCAAAT ACTTGCCCAT TGTTTGCTGT TTCTGANITG TACAAGGCCA TCATGATAAT TGATGATCTT AATAATGTGA
 GAATATGATT CINTTACCTT AGTAAGAGAG CCATCAGTTT ATTGGATGAT AGTTATATGG AAAAGAAGA AATGCTACTG
 TGATAAATAT TTATAATTTT AAACA

SEQ ID NO:978: (Length of Sequence = 285 Nucleotides)

ATGGTGGGCT GCGCTGGCCG AGGTGGCCAA GATGGCACTT GTTCTGCTCC TCANAAGAAA AGGCACTGAC GCACTGACCC
 TTTNAGGTTG TNGGGGTGT GGTCACTGCC CTCCTGCTG AGGTCAAGT GTGTTTTCAA GTCAACTTCA GCAGACCTCA

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CTGCCTTCTG GGTCAAGCG ATTCTATGC TTCAGCCTCC CAAGTAGCTG GGATTACAGG CATGTGCCAC CATGCCAGT
TAATTTTGT ATTTINAGTG GAGATGGGGT TTCGCCCTGT TGACCAGATT GGTCTTGAAC TCCTGGCCTC AAGTGATCCA
CCT

SEQ ID NO:967: (Length of Sequence = 365 Nucleotides)

GTGTACATTA TATGTTGTAC ATATTATTNC ATCACCAGG TGTAAAGCCC AGTNCCTAAT AGTTACCTTT NCTGCTCCTC
TCCCTCCTCT CACCCCCCTG CTTCAGTCT ACCCCNGTGT TTTCTTCTTT GTGTCTCTAA GTNCTTATCA TTTAGCTCCC
ACTGTGTAAGT GAGAACATGC AGTATTTGGT TTTCTGTTC TTTGTAGTIT TACTAAGGAT AATAGCCTCC AGCTCCATCC
ATGTTCCTAC AAAAGTCATG ATCTCATCT TTTTATGGC TGCATAGTAT TCTGTGGTGT ATATGTACCA CATTTTCTTT
ATCCAATCTG TCATTGATGG GGCATTTAGG GTTGATTCCC TGCT

SEQ ID NO:968: (Length of Sequence = 390 Nucleotides)

GTGTATAGTA ATTTAATAGT AATTAAATGT AGAGTATTGT TAAAAACAAG GAGAGGAAAA AGAACAATTC ATATTGAGA
ACTCCTAATA ATCTTCTAGA GCAGAGTTCA AAGAAGCAGT GGTAAAAATA AAGCCAAAGA GATATAGGGG CTAGTCTTAG
AACCAGGACT TCCTATAGAA CCAGCTTCCT ATAGAATCTG AACITTTATCT GAAACTCTTT CACAGATCTC CTCCACCTTA
ACTTCCACAA AATAAGAAAT TTGGATTTTG AAGGCAAAIT TGTATATTTT AAGGAGCAGG ACAATCTCAG CTGTATCTGG
GTTTGCAGAT ATCCAACAAA TCCTACCCAA ATCACTTTTC CAGCTGCAGA CTGGGAATTT CAGATCCAGG

SEQ ID NO:969: (Length of Sequence = 340 Nucleotides)

CAGACAGAAA AAGATTTGAA GAGACGGGTC AGGAAGTAGC GGAATTACTG GAGGAAGAAA AACTAAGTTG TGTGCCAGTN
CTCATCTTTG CTAATAAGCA GGATTTGCTC ACAGCAGCCC CTGCCTCTGA AATTGCAGAA GGAAGTGAAC TGCTATCCAT
CCGGACCGA GTCTGGCAGA TCAGTCTTG CTCAGCTCTC ACAGGAGAGG GCGTTCAGGA TGGCATGAAC TGGGTCTGCA
AAAATGTCAA TGCAAGANG AAATAAAATC TAGACGAATG GAGATGCAGG AGCTTCGGGA GCGGAATTCG GGCCTTAAAA
ACACTAATTT GCTGCTTTCT

SEQ ID NO:970: (Length of Sequence = 372 Nucleotides)

TTTTAAGATG GGATCTCAG GTTACCAGG CTGGAGTGCA GTAGTGGTTC ATAGCTCACT GTGGCTCAA ACTCTGAAC
TCAAATATC CTCTGCCCTC AGCTCCCAA ATAGCTGGGA CTGCAGGCAC ATGCCACCAT GCCTGGCTAA TTTTAAATT
ATTTGTAGA GATGGGGTCT CACTTTGTTG CACAGGCTGT TTGCTTGATT CTTAAGAACG TATAGGGATC CAGCTGTACA
GAGCTTCTG CAGTCTTTG TAATAGAATT AGTTGTTAAA ATTGTACTTA TTACATGAGG CATCAAAGAC CTGGAATAA
AGCTATTNCC TCACATATCT GGGCCATTAT TTGGACTTA CTATGGTTAC CG

SEQ ID NO:971: (Length of Sequence = 337 Nucleotides)

GACTATAGAG AACGCTGAAG TTTTGAATAA AAGACTCTAG GGTGAGCTTC ATCAGTGCTT GCTTTGGNTC CAAGATGTAA
TGAGATTCTN CTTTCACGTC AACAAATGCC GCAAATNCTT TCACCTGAGT GGAGCTCGGA GCACCCAGTC TCTCTGCATA
TAACCAAAC AAATTTGAAT CCAAAGGTA GATGTTGAGA GTCTTGTGG TTCTGCAGCT CAGGCCTGTG AAGTTTGTG
TAGTCATGTC CACTTCTGGA AAGAGGATAC CTGINCTCCT CAATGTGAGG GAAOGGGAGC TTNGGGGCAT CAACCTCACA
TTTTCTCTC AAGGGGA

SEQ ID NO:972: (Length of Sequence = 396 Nucleotides)

TTCTTTTACA TCAAATATCC TCAATGGAAG AGGGATATT GCACACAAAT ATCATAAAG CACTACATAT TACTTTCACT
GGAACTAAT TTNCTACATT AGATATGACT GGATAGGATA GAAGTGATGC AGGATTATAA GACATAATAC CATAACAGC

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GGAAGACAGG GAAGGACCAG AGGTGTAGGT AAAGCAAAA GCCACAGGTC ATTAGGAAGT GATGCTCCAA CTGGGCATGG
 AAAAGGAGTT TGGAGTTAGG AACACGACAG ATCTGTCTGG ACAAGGNTCC AGATCTCTCC TAGGGGGAAG NAGGGGCAAC
 TTAGGACAGT TTTGTGTCT GTGGG

SEQ ID NO:961: (Length of Sequence = 327 Nucleotides)

GCTGAAGAGG AACATGTGTC CTCGGCCACT TCAATCACTG AGTGTGACAA ACTTCTCTCC TTGCCCACAT CAGTGGGTGA
 GGACCAATCT NTGGCCTCAC TTACAGCTCC CCAGACAGAG GAGACAGGCA AGAGCTCCCT GCTGCTTGAC ACAGTCACAA
 GCATCCCTTC CTCCTGACT GAAGCTACGC AGGGCTTGA CTATGTGCA TCAGCTGGTA CCATCTCACC CACCTCCTCA
 CTGGAAGAAG ACAAGGGCTT CAAATCACC CCCTGTGAGG ACTTCTCTGT GACTTGGGAG TCAGAGAAGA GAGGAGAGAT
 CATAGGG

SEQ ID NO:962: (Length of Sequence = 369 Nucleotides)

AATTTAGATT TGCAAGTTTT CTACATTTTC AAAACA AAAAACA CAAAAACAA ACAACAAGAA ACGTAGACTA
 GTTGGGCTCT GTCATGCCA GGACATGAAT CAGCCCTCA TCCAGCTCT CTGACCATT GTCACCTAGT GGTCTCTTG
 GTTTTCAGAT AGCAAGAAG GTGATTACAG CACGATATTT TGACAGAGAC CACATTCACA TAGCTTTTAT TAGTTATTGG
 TTGCTGTAA TCCTCTACTG TNCCTGTGA AGCTTTATCA TGGTATCTAC GTAGAGGGAA AAAGCCACGG TATAGATATG
 TAGGGTTCCA TACTATCCAG TCTCAGGGCA TCCACTGAGG GGTCTCTG

SEQ ID NO:963: (Length of Sequence = 278 Nucleotides)

CTCAACACC CGAGGCGGG AGGAAAGAGA AGCCGATGCT TCAGAGCAGA CACTCCTTAG ATGGCTCCAA ACTTACAGAG
 AAAGTGAAA CTGCTCAGCC GCTGTGGATA ACGTTAGCAC TGCAAAAGCA AAAGGGTTT CGGAGCAGC AGGCGACCG
 GGAGGAGAGA AAGCAAGCCA GAGAGGCCAA ACAGGCAGAA AAGCTCTCCA AAGAAATIN GAGATCTCG ACTCGGCTCC
 CCCAGCGCG CTGGTAAAAG AAGTCACCAA GAGGTTTT

SEQ ID NO:964: (Length of Sequence = 349 Nucleotides)

ACACTCTCA3 TATAGACAGT CGTGAAGAAC AAGGCTGAGG GATTTTNAAG TAAACCCATT TTCAGGATGA CTACAATCCT
 TCCACTTCTA GAAACTTAG AAGTACAAGA AATAGCTCTA CTACGGGTAA CTGATTTAAC AATTTCCCAA ACACCTTTC
 CACTACCCAA GCCCCTGGCC CTCAGAGAGA ACCGGGATGG ATTGCCATCT GGGTTCAGAG GCAATATGAG GAGGTGGGG
 GGATGGCAGG GGCATCTCA GGGTGGGGG GCAGGCCAAG GGGATGAGAT GGCAAGGAC AGCTTTINGGA ATCAGATAGA
 CGATCCAGCG TGCCCTCCTA CACTTGCAT

SEQ ID NO:965: (Length of Sequence = 361 Nucleotides)

AGCAGCAAGC CAGACGTGAC TGTGAGAAC AAGCTAAAT AGCTGTGGAA GCTCAGAATA AGTATGAGAG AGANTTGATG
 CTGCATGCTG CTGATGTGA AGCTCTACAA GCTGCGAAGG AGCAGGTTTC AAAAATGGCA TCAGTCCGTC AGCATTTGGA
 AGAAACAACA CAGAAAGCAG AATCAGATT GTTGGAGTGT AAAGCATCTT GGGAGGAAAG AGAGAGAATG TTAAGGATG
 AAGTTTCCAA ATGRTATGT CGCTGTGAAG ATCTGGAGAA ACAAAACAGA TTACTTCATG ATCAGATCGA AAAATTAAGT
 GACAAGGTCG TTGCTCTGT GAAGGAAGGT GTACAAGGTC C

SEQ ID NO:966: (Length of Sequence = 163 Nucleotides)

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TTATAACATT TTGAAGAAAA TCTTTAAAAA TTTTGTGTTA CACAGAAAAT AATCTTAGAA A

SEQ ID NO:954: (Length of Sequence = 217 Nucleotides)

AGAGCTTAAA AATAGTGAAG TCTTTATAAG TAATTTTAA AAATTTAAAC TAGGACCATA AATTTCTAAA CTATGAGATA
AATGANCAAG AAAACAAACA GGTGTTTAGG AAAAGGTATG TATATGGTCA ATGAAATAAA TACAACGTGA TTTTAAATGA
GANITAACAT ATTTTNNTTT AACAAAAGCA GCATGTAACA CACAATGTAT TATATGT

SEQ ID NO:955: (Length of Sequence = 260 Nucleotides)

TATTTGATAG AATTTTCTAG TGAAACCATC CTGACTTGGG GTTTTATTTT GGAGGAATTT TAAGTTATTA ATTCCGTCTC
CTAATAGTG ATAGGACTAT TCAGATTACC TTATTTTATA TTTGGTGAGT TTTGGTAGCT TGTGTTTCTC AAGGAAGTGA
TCCATTTCAT CTAAGTTGCC AAATTTATGT GTGTATAATA ATTTGTAGTA TTCCNGTATT ATCCNTTTGA TGTCTGTAGG
GTCTCTAGTG ATATCCTATG

SEQ ID NO:956: (Length of Sequence = 216 Nucleotides)

CCCTATTAAA TCATTAAGCA TTGCATGCAA TACTTTTNCCT GTGAAAATTA TTAACCTCCT GGTATATAAA ATTATTTCTA
GTATGTTTAA AATATTTCCN CIGGGATATT ATCATCTTAG ATCTGTAAAG TGGTACTAAA ATAGTTAAAA ATTATTTNTA
AGATATACAC AAACAGAAAA ATATAAAANC AAATGTATCT TATACATAGT ACTTGG

SEQ ID NO:957: (Length of Sequence = 353 Nucleotides)

TATGTACCAG GTGTGGAGCC TAGAACAGAC ACCAGTCAGA AGTGCAGATA AGGTCTGACT TTCCAGCATA GCCAGGGGAC
TTGGCTGACT CCACATGTCC CCAGGCCTTA CCTAGCTGTA AAGCAGGCAG GTTGTGAAGT CATAGTGGCA GTTTATGAAA
TATTTAGGGG ACCTAATAAT CTTTAAATTG TATAACATTT CTTGCATAAA TTTCCTTTCA TGAATCCTTT CATGACTTAG
ACCATCTATG ACATGCTTGG ACTTTCTGAC TTGTCTTAAC CACCCCTCTC TTTAAACAAC CAGTCTTTTT ACTTTAGGAC
AAGAATTTAC CATACAAGAT TCITTTGTAT AAA

SEQ ID NO:958: (Length of Sequence = 410 Nucleotides)

AAGGAATGA ATTTGATAGC AGATTGTTAG AGATTAAITA CCTATCATAT GCCAAAGCCA CTTCCTACAT GTCAGTGCTA
AGGAATCCCC TAGAGATGGA ATTCCTAGGT TCAACTGAAA ATTAATTGTA ATTAATATAA TAGGTTAATT CATGTGAATT
ATTTTAAAGC CTTTGGCAA TGAGTTAATT CCACAAGATC CACATTGCTT GAAGTGTAC AGAGAACACT TGATGAGAAT
GTNCTAGTAA TAAACCTTAA CCTCTGGGG AAAAAATCCT ACTGTCTTTC CTTCTGGCTT CGTTCTTCTT GGAACATATT
TNGGTGGCAT TTGGATATCT GGAGGACAAA GGGATCCCTA CAAGGTGGNT GCATAAACAT GCGTGGGCCC AGATGGACTG
TGCTCATTTG

SEQ ID NO:959: (Length of Sequence = 197 Nucleotides)

GCCCGGCGAC CGTAGCATCT TCTGGACCAC AAAATAGAAC ATTGCCAGGC AAGGCAGGGC ATTTGGGGAA TTTNAGAGAA
AGCAGGATGA GTGATGGAAT TGGGAGGGTG GCACAAGATG TTAAACAGCA TATCTTAGTC CTCATCTAGG GTATAAAACA
GGACCCATGG ACTCTAGCAT CCTGGAATGA CAGAGGG

SEQ ID NO:960: (Length of Sequence = 345 Nucleotides)

AATAAACTTC TGTGTGTTTA AGCCACCTAG TTGTGGTCACT TTGTTATGGC AGCCTTTGGA AACCAACACA CCCGCACATG
GCGTGTGTTAA CGCAGGCTGA TACAACCTTA AGAAAGGAAT GGNITGTGGTC ATCAGCAATC TCCAATACCT ACAGCAAATG

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SEQ ID NO:947: (Length of Sequence = 335 Nucleotides)

GGAGGTGCAT TTNCTOCCCC TTGAAAGAT TTATGTAGAT TCCTAAAAGA AAATTCAGAA TATGGAGTAG CTCCTGANTG
 GGGAGATGTT GTTAAGCAAT CTGGATTCTT TOCAGAAAGC ATGTATGANC GTATTCTCAC TGGTCCCGTT GTGAGAGAGG
 AAGTAAGCAG GCGGGGGAGA CGGCCTAAAA GTGGAATTGC AAAGGNCACA GCAGCAGCAG CTCTGCAATC TGCCACCACT
 GTTTCAGGCA ATCCTTTTGT TTAAGCCAAT GGACCTACTT CCAGGGNGTG GGTCTCACA AACTINTTTC AGGGCCTTAC
 AACAAAAACC TACAA

SEQ ID NO:948: (Length of Sequence = 216 Nucleotides)

GGATGTAAGC TCCAGACAG ACATCTCGGG AAGCTTCGGC ATCAACAGCA ACANTCAGTT GGCAGAGAAG GTCAGATTGC
 NCCTTCNATA TGAAGAGGCT AAGAGAAGGT TCGCCAACCT GAAGATCCAG CTGGCCAAGC TTGACAGTNA GGCTGGCCT
 GGGGTGCTGG ACTCANAGAG GGACCGGNTG ATCCTTATCA ACGAGAAGGA GGAGCT

SEQ ID NO:949: (Length of Sequence = 369 Nucleotides)

CCCTTCTCA AAAGATAAAA ATCTCTGGCA GAAGAAATAG TTACCTGCTG CCATCCATCA GTAAGTCAAT TACCATGACT
 CTAAGTGACC TTCTTGCCCA ATGTTTAATG CACAATGGAC CGTCCCGAGG GAGACCTGGG CATINTCTGT TGCCTTGTC
 TACAATGATC CCTTCTGTT TAGCAGCGTG ANTCACGTAT GGTCATACTC TCTGAGGACT GTACGCATTT TCACCTATA
 TCCACCTGTA CCAGAAAACA TGGACATAAT TTAAAGTTTA TTCTACTTA ATAGAGTGAT ATTCCAACCT GTGTGGGAAA
 ATAACCATIN GTACTCTTT AAAGGAATGG TATTTAATCAT TTATTTATA

SEQ ID NO:950: (Length of Sequence = 288 Nucleotides)

AATGGTGAAA TAGAAGTCCA ATTACCTGGG GAAACTTCAT CTTAACCTC TGGAAATTNC AGTCTAACCT AAATATTGAT
 ACTACACCTG CAGCAGCAAT TAGTTAGCA TGTAGTGAAA AAGTAAGTCT AAAAAATATT TNCATAATCT TTGGTTCCTA
 AAATTGTTTT AAAAGAGATG CAGTGACATA TGTCTGGAGT TTGCTTATGG CCAATAGGTT AATGCTTCTA GCTTCTATGC
 TTATTGCAAA TTTTAATTAT GTGAATATGC AATTTTCACT TATATTG

SEQ ID NO:951: (Length of Sequence = 302 Nucleotides)

TGTCAAGATG TTACAAGAAC GATTCCGGGA GTTINCCGA NACACGGGA ACATTGGGCA GGAGCGGTG GACACGGTCA
 ATCACCTGGC AGATGAGCTC ATCAACTCTG GACATTGAGA TGCCGCCACC ATCGCTGAAT GGAAGGATGG CCTCAATGAA
 GCCTGGGCGG ACCTCCTGNN GCTCATTGAC ACAAGAACAC AGATTCTTGC CGCTTCCTAT GAACTGCACA AGTTTACCA
 CGATGCCAAG GAGATCTTTG GCGGTATACA GGNCAACAC AAGAACTNC CTTGAGGAGC TT

SEQ ID NO:952: (Length of Sequence = 302 Nucleotides)

TTTTTTTNT CCACTTCACA GTTGATGCCA ACCCAGCCTG CATCACAGAG ACATTATAT CCACTGAGAC CTCCAGTACA
 GTTCCATGG ATGCAGGGAT TGCNAGGCA TTGTTTACC TGTNAGTAGC AGCTGGGGTG ATGGGGTCCC TCGGGGCATA
 TACAGCGGAA ACCATTGACA CCGTTGATAC ATGTNGCACC CTGCGACAG GGATTGGNGG CACACTCATC AATGTCAATG
 TTACATCTCT GGCTGTGAA ATCCTGGTGA GCAGACACAA CTGTAGCGAT TAATTGCCAT CC

SEQ ID NO:953: (Length of Sequence = 301 Nucleotides)

GAAATNAAC TTGTGTTGAA AAGTTAGTAT GGGTTAGAAA TGGGAAGAAA ATCTAAAATG TAAGAGTAAA AGCAAGGCCT
 TCATGGCATT CTCCTTTAAT ATGGGCTTIN CTGTGTTAGT TAACATCTGA TAATATGACC CCCCAATCTA TTAATATTTA
 TTATACTCAT AAAATTACAG AAAAAACCTA AGAAAGGTA TGTATTGAAG TGGAAATGAAT AAATGCAAAA AATGTAGTAC

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GTAATCCAG CTACTTGGGA GGCTGAGGCA TGAGAATTTT TTGAACCCGG GAGGCGGAGG TTGCAGTGAG CAGAGATCAC
 GCCACTGCAC TCCAGCCTGG GCAACAGAGC GAGACCCTGT NTCAAAAACA ACAAATAAA TTTCTTTTA ACATCTGINC
 CAAAATGAG ATAAGOGTFA TCAGGGCAAG TCCATCCTCA TCACTCTTTC CCTCCOACT GCCCTCTCCA CGATGCCAG
 CTGATCAAAA GTCAATTTTA CTCATAAGAC CAAAGTATCA TGGGATACTG TGCAGTINGA GAGCAGGTTG ANCATCAGAA
 ATAATTGCTG ACAATAAAGT AAAAGATGGG AGAAAAGCAA GGCCNATTGT ATATAATACA GCTTC

SEQ ID NO:941: (Length of Sequence = 406 Nucleotides)

GGTAACAGGT TTTTACCAAC AATGCTTGT AGCTAATGTA GAACATACTT GAGAAAATGG CTTCTGTGAA AGACCAGTTA
 GTACCAAAAT AATCTGGCCC AGAAAAATAG CCACCATTCT TGACTACATT AATAGAAATA GAATAACCCC CAAAGGGAGA
 TGAGAAGCAT TCTAAAGTGC ACTGATCATG AGTTTCTATG TGATGATTG TGTCCATTG GAGCTCCAGT GCTTTAAAGC
 TGAAATGAAT CCTGGCCTTT CACCACCTC CCTGCCATA GTATGGTATA TCTCTTATT CCTTCCCTCT TAGCTTACTG
 AGAGTGTAAAT TTCCAACCAG TTAAGGCCAA AGAGGACTAT TTTCTAGGAA AGGAGAGAGA GATGAATTAG CAGTTAATGG
 AGGAGT

SEQ ID NO:942: (Length of Sequence = 296 Nucleotides)

GATGGCTCAT GCTAGTTCAG CAAATATTGG GCCCTTCCTG GAGAAGAGAG GCTGTATCTC CATGCCAGAG CAGAAGTCAG
 CATCCGGTAT TGTAGCTGTC CCTTTCAGCG AATGGCTCCT TGAAGCAAA CCTGCCANTG GTTATCAAGC TCCITACATA
 CCCAGCACCG ACCCCCAGGA CTGGCTTACC CAAAAGCAGA CCTTGGNGAA CAGTCAGACT TCTTCCAGAG CCTGCAATTT
 CTTCATAAT GTCGGGGGAA ACCTAAAGGG CTTAGAAAC TTGGCTCTC AAGAGT

SEQ ID NO:943: (Length of Sequence = 223 Nucleotides)

GTGCCATTAC AACTTINCIG TAACCCTGAA ATTGIGTCAA AGTGAAATTT TTTTAAATGA GATTATAAGA GCATAATCAA
 ATTGGAATTT CCTTAGGATA CCAGAGAATC ATTINCTTCT CAGGTAAAGG ANTTTTCCTT TINGTAGTCC AGAGCTATAC
 ATGATTAAGA AANTGTTTCA NCCAGGAAGA TGACATCTCT GCTAACCTAA TCGATTATCA TGG

SEQ ID NO:944: (Length of Sequence = 327 Nucleotides)

CCAGGCACTC AGGCTGGCTG TCCCTTNNNT CCTCCIGCCC ACCCCATCCA CTCIGAGCAT CAATGCAGCC GGCCAGTTCG
 AGGCAACCAG GCAGCACCTT GGCTGCCAG GCAGGCTAAG AGGCCCCAC CCACTCCCC CTCTTTGCC AGTGGAAAAG
 CTGCGGTAG GCATAGCTTT CCCAGCCTTC CCTGCTTCAN AGGCAGGAGC ATGGCACTCT GGGAGTTGTA GTGCTCATAA
 CACTCAGGCG ATCCCTTGIG CAAATAACTG GAGGAGAGGA CTATGGTATT GGGGAAGAGA AATTNAGGAA TAAGCAAGGA
 GTTGGCT

SEQ ID NO:945: (Length of Sequence = 222 Nucleotides)

CTTAAACAAT AAATACACCT GAGTTAGTTT TCCAAACCTT TCCTCTGAT TAAATGCCCT TAAACTTAA ATCTCTTGTT
 ATCTTCAGTT GTGATCTAGT CCCAAGTGGA AATTACGTTT AGCTTTAAAA CCATGAATTT AAAGCTCAAG CCTGTAGCTG
 GCTGCCTAGG CANTTTATGA TTAGTTTAC AGAATAGCAC CCACTGGCTA CACAGNCCC AG

SEQ ID NO:946: (Length of Sequence = 286 Nucleotides)

GCTCTCTCTA CCCCCATC TAGGTATGIN TATAGCTCAT TTATTTAGGG GTGATGTAA AAAATTGAAT GCCCTTAATG
 GCAAGGGAAC CAACCAATCA ATGTGGATGC CACAACCTTT TCCCCGTG ACTGTGTA TGGTATGGA AGTATTTTTT
 TTTTCTCCA GCTTTTATTT CAGGTTCAAG GGATACATAT GCAGGTTTGT NACATGGGTA AATTGCATAT TGTAGGGGTT
 TAGTATACAG GTTATTTTAT CACCAGGNA ATAAGCGTAG TACCTG

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SEQ ID NO:934: (Length of Sequence = 336 Nucleotides)

GGGAAAACGT ATCAGCACAT GAAATACCTT GTAACATTTT CATTATATATA ATTTGCTACG TGTCTTTGTC AACATAGTGA
 AAAATAATCA TGTCTGATGT TTAGTAGGCA CATAATAAAT AGTAATGGAA TGAATGGTTG TATATTTAGA GAGCCATGCT
 GAAAGGTAA ATAGCAAAT ATGACTACTT GGAGAATAAT GTTAAATTGT CAAGGAGAGT AGTGTATAT GAATACTCAG
 ATGGATGAT ATATAGANAA TGAGAAAAGC GACAGAAGGA ACTTAAAGAG NTTTTAAAA TAGCTTTGTC TAAAGATTAA
 AAATTAAAGG TTCTAA

SEQ ID NO:935: (Length of Sequence = 383 Nucleotides)

AGGTAAGAAA ACTGCTGAGT GGGCTCCTTG TACCAGCACC AACCAGCAGC CCTTGACAGC ATAGATGGGA TGAGTGTAAAG
 GGCTATCCTT AGCATAAGGG AAAGACGGTT ATAAGCTGAG AAGATTGAAA GAAGAATGGA GCCACAAAGA GAATAGCATA
 AATAACAAGA AGGAAACATG AAGAACAAGC ACTTAAGNTA TTAACCTTCA GTCTTTCTCC ATTTCTTGAT GTCTAATGAG
 GCAAAATAAC TGGGCAAGGA CCACCAAGAT GAAGAAGTTA AATAAAATGT CACAATGAAA TTNAGGTGCA ATAATACAAC
 TGTTGACTGA CTTTCCAAAA CCACGGTGAT CGGTAGAGTA TCATCAATGT TACCGAGGAT TTT

SEQ ID NO:936: (Length of Sequence = 204 Nucleotides)

GAAGCTGTGC CACCTTCIN AACTTINATG AGCTGCCINA GCCGCCAGCC ACCTTCTGIN ACCCAGAGGA AGTGGAAGGG
 GAGCCCCGAG ATGCCCCCCA NACCCCAACT CTGCCCTCAG CCTTGAGGA GCTGGAGCAA GAGCAGGAGC CGGAGCCCCA
 CCTGCTAACC AATNGGAGA CCACCCAGAA GGAGGGGACC CAGG

SEQ ID NO:937: (Length of Sequence = 386 Nucleotides)

CTAACTAAAT AAGGGTGGC AGATAAAGTA CAGAAGGCC AGTTAACTT GAAATGCATA TGANCAAGAA ATATATTINA
 GTATGANIAT GTCTCATGCA ATATTGGGA CATAATTATG CTAAAGAAAG TATTACAGT TTINCCAACA TTCAAATTGG
 AATGAGTGTG CTGTATTTIN ATTTGCTAAA ATGGGCAACC CTAGCTGGT ATCTCTACAG TTACATACAC TTACCAACCC
 CACCCATTCA TACTGGTCCA AGTTACACCC CAAAAGAGGG CAGAAACAGA ATCTGAACAA GCTCAAGTTT NGAGGGCAAA
 AATGTTTCAT TCTGCCCTCT GGATINCTGT ATGAAGACTT TTGTGTGAA AGATATGAAT AGAACC

SEQ ID NO:938: (Length of Sequence = 349 Nucleotides)

GACACTTCA GAATTAAGAA GCCTTGCCCT CTTTGGGTGT CTTCACAATT GINTTAAGTC TATTATAGTA TTCATTTTAG
 TTTGAAAGCA ATAAATACAA TATTAGTACA AGCACACTGT CAAGAAATCC CTAGAATATG GCTCCTCTGA AGGTGACAT
 GGGTCTGCT CGCATGTATC TTITCATCTC CAGCATCCAG ATCAGAGTCA ACAACAACAA CTCTACAAAT ATCAGGCTTC
 TTGGTGGAAA GAAATCTGGA CATTTTINCT ATGAAAAAAA AGTTAGGTTA CATGGCATTA ATATTTTTCG TAGACTTAAC
 CTACAGAAAA TGTTCAAGC TTATAAAA

SEQ ID NO:939: (Length of Sequence = 374 Nucleotides)

GAAATAAGC CTCACAAGAA ATAAGGTGCT TATGGTGTTA AGTTACAATG GAAAATAATC AATGGCATTT GTATGCATGC
 TGATGTGTG ATGTAGATCA GTTCATAGGA GATGGGGCAA CAAATAAATA TCACCATGGG GATGTGATCA TCAAAACCCA
 GGCTGTGGAA AACTGTCTAGT CAAGTTCTT CAACATATTG CAAGAAAAAT ATGATGGCTT GAAATCTAT AGATGAAGCA
 ATTTAACAAA CCTACCAATC TCATTTAATC TTGATTACTT TTAATAAAG ATTAATAAGA TGACAGAGAA AGGGTTTAAA
 AATTGTAG ACACGGCTGG ACCGTGGGC TCACACCTGT AAATCCAGCA CTTT

SEQ ID NO:940: (Length of Sequence = 385 Nucleotides)

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SEQ ID NO:927: (Length of Sequence = 286 Nucleotides)

GGCTGTCAATG AGAATCACAT GAACCGGGA GGGGAGGTT GCAGTGAGCT GAGATCATGG CACTGCACCC TAGCCTAGGT
 GACACAGCAC AAAAAAANC AATGTTCCAC AAGTCAAAA TTGTNTTCAG GGAGTAGAAA AGTAGTAGGC TAGGTATCAA
 AGGGTATGAA TGACTAAGIT CCTCTATAA TATATTGACT ATAGGTTAGG AGATACACTT TCAGTTCCTG TTTTNGTAG
 ATCTCCCAAT GATCTGTCT TTAAGAGTAC ACACGATGAG TGGAAA

SEQ ID NO:928: (Length of Sequence = 349 Nucleotides)

CTTGTTTAAC CAGTATTTAT TGCACATGGT TTTGTTATCT ATTGCATGTG GTAAATTACC CCATCTTTG CTTCTTAAAG
 CATTAGACAT TTCTGTAGGT TAAGAATTCA GAAGCAGCTT AGCTGAGCAG TTCTTGCTCA AGGTCTGTCA TGAGGTGCA
 GTCAAGGAGC TGGCCAGGCG TGCAGTCAAT TGAAGGCCTG ATTGGGGCTG GAAGACTCCC TTTCCAGATG GCTCCCTCAC
 AGGCTTGGCA TGTCAAAGCT GGATGTGTGG CAGGGGACCT CCATCTTCC CCACATGGGC ATCTCCATAG GCTGTTTGAC
 ATGGCAGATN GCTTCTCCA GCAACTGGG

SEQ ID NO:929: (Length of Sequence = 395 Nucleotides)

AGAGGAGGCA GCAGCCACCC CCAAGAAGAC TGTACCTAAA AAGCAAGTTG TGGCCAAGGC CCCAGTGAAA GCAGCTACCA
 CCCCTACCCG GAAGGTTCT AGCAGTGAGG ATTCTCCAG TGACGAGGAA GAGGAGCAA AAAAAACCAT GAAAAATAA
 CCAGGTCCCT ACAGTTCAGT CCCCCGCT TCTGCTCCCC CACCAAGAA GTCTCTGGGA ACCCAGCCTC CCAAGAAGGC
 TGTGGAGAAG CAGCGCCCTN TGGAAAGCAG TTAAGACAGC AGTGATGAGT CTGATTCAAG TTCTGAAGAA GAGGAAGGAA
 ACCCCCAACT AAGGCGAGTA GTCTCTAAG CAACCACTAA ACCACCTTCA GCAAAGAAAG CAGCAGAGAG CTCTT

SEQ ID NO:930: (Length of Sequence = 214 Nucleotides)

ATCCAACAAT GACAATCCT CTTCGGACAA TATTGGCACT CCATTCAAAC CTTGTTTCAG GTCAGTCCGC ACTTCATCAT
 CTCCCAATTT GTCCAAACA TACTGTAGCT CAGTACAGT TTTTAAACGT TTCTGTNCAG CTTCTTCTCT CATAAGCTGC
 TCCCGACGTG CTGTCTCTT NATGTGTTT TGAATATCTT GACTTAGTGC CATG

SEQ ID NO:931: (Length of Sequence = 245 Nucleotides)

GAAAGTNTT ACAATCATGA TGCTATCTA ATAAATATC ACTGAGCAAT AAGGAGAAAT ATTTTAAATA GATTGAAGT
 TGTGAACAAA TAATTAGAG TCCAAAGAGG ANAAAGANAA TTAAGTCTGT TTTTATCCC TAGAACTCAG AAACITTTACT
 GGATTTGTCA ACAAGACAA ACTTTTATT GTATAAACA GTAGANTTCA TGGAAAGGAT AATNCITTTT GAACAGGCTT
 CTCGG

SEQ ID NO:932: (Length of Sequence = 303 Nucleotides)

CATATTGGGG GCCAATATA AAGCAAAGCT GGAAGAAGGG ATGATCCATG TATTNTGGG GATGGGATAT GGACAGGGAA
 ATAGTGTTC AACTCCATGC TGAGTGTGT TTTGAATTGT AATGTGAAGT TGCCACCATA CCAGGGCTAT GACTGTNTAC
 GATGTCTCAC CCTGTAGGC TAGTAGCTTT GCAGTGGGAA AAGATGACAG GGCCACTTGT CCAGGGCAIT CAGGTAAATA
 AGTCCCTGAG CTCCAAGTTG CTAGATCTAA GGAAGTATTT TTCCCTTCAT GTCAAAGATG GGG

SEQ ID NO:933: (Length of Sequence = 186 Nucleotides)

CTCTTTTGGG CTG-ITCANA TCTCCGGCGA ATTGAAAGCA GTGATCTCTC AGGTGCTAAC CGGNATAGTA TTAGAAGACT
 CCAATATCTT GCAGCCTGTG GGACTTACTG TATTATCTT TGTTTTGTTT CATTTGCTTT TGGGTCTCTG GTCATGAGGT
 TTTGCCAAG CCA-IGTCTT CAAGGG

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SEQ ID NO:920: (Length of Sequence = 299 Nucleotides)

CCCAGGTA CT CAGGGAAGGG GCAGGAGAAC CACTTGAGCC AAGGAGTTCA AGGCTGCAGT GAGCTGTGAT CACACCACTG
 CATTCCAGCC AGGACAACAG AGTGACATCC TGCTCTCAAAA ATAAATAANT TTTTAAATGA TGAAACTAAC TAAGGTACTG
 AGGAGGTAAG ATATTTTCCC ACGGTAAGTC ATTCAGAAAC TAAATGTGAA AAACCAAAAG AAGCCTCTGG GGTTAGTATT
 CCCAGTCTCC TTGCTCTGCC AGGACCCAC ATTTGTGTAA GTTGCTAATT GCACAAGGG

SEQ ID NO:921: (Length of Sequence = 234 Nucleotides)

ATGAAGCAGA GGCAACCAAC AGAAATTGAC ATCAGAACT CTGCTGNTC CCCACCAGCA TGCTACCGAT GANTCCTGCT
 CTCTTTTCTG TGAAATTTTA TTTTNTNCC AATAAGGCCA GCCCTACCTT GGAATCTGGA ACCANTCTG GCCCAGGTA
 GAAAGGCTAC CAAGCACCTA TGGTAGAAGC CTTGGTGTCC AGGATGCTT TGGNCTTAT TATTGACCTT CTCT

SEQ ID NO:922: (Length of Sequence = 328 Nucleotides)

TAGCAGGGT ACTGGCCTTG GCTGCGGCCA AGGGAAAAC CTGACGCCC TATTACTTGG CGGCCTTAA CTCTTATAGA
 ATTGGGAGAG AACACTGACA AAAGCGAGGA CATGATTIN CGGTACAAA TNATTTTCTT TGCTTGCTTT CTCTCACCC
 TTTTNAATTT TCCTTTTCIN CTCTTCTGT CTATCTTACC TTCCCTCGT GATCCCTGCC AGCCCTCTCT TTCTTATTAT
 AGCTGATCAT GGCAGTATTG TTTTNTNCTG GGTAAAAATC AGAGTGGGAT TTAGAGAAAG CTAGCAGGC CTAGCATGAG
 GGCCTTAG

SEQ ID NO:923: (Length of Sequence = 371 Nucleotides)

CAGGAAACCT ACTGTGAAAA TGCAGAAAA CAACAGCAA AATTGATGTG TGACTCAATA TGATATATAG TTCAAATGTA
 AACAAATGCT TGINAGCATT CCACATCACT GAAGGAAAA AAGTAAGTA TTATTTCCAA TGTGGGAGT TAGGTTGCTA
 TAAGCTTATG ANCACACACT TTCAGTGAAT TTATGTAGAA TCGGAAGCAC TTCACTCTCC CTCACCACA CATCACCCCC
 TTGCTCTCC TCGACACGTG CAAAATGATA GGGCATGGTA GGGGTTGTAG TGAAATGAG AAGGCATGCC CCATCTCAAG
 AAACAGGGTG GACCAGCCAC AGCTTTTCTG TOCANTTGT GATACAGGAA T

SEQ ID NO:924: (Length of Sequence = 371 Nucleotides)

ATGATCTGCT TTTTITGAT ACCTTTACTT TINAGT AGNGCGGG TTTCTGGAGC CGACTGAGGG ACTGGAGAAG
 GCTACGGGG TCTCGCCCT GCCAGGGCAA TCTTTT CTCTTATCA TTGGTTATG CAAATCGGG TAAAGTTTTT
 CGAAGGGGG TGCTGGCTCC TCTTGGCAGC TCTCTTACT GACTTTGGGC ACCAGGGCTG CTCATACCTG CAGCCTTTTC
 GGCCCTCTG GCCCGCAGGC GTCGGGCTC CGAAGCACT GCCATGGCCC GGAATAGCAG CCCGAGCA AGG

SEQ ID NO:925: (Length of Sequence = 317 Nucleotides)

AATGCTTTAT GATCAACTTG CCATAGGACT GATGGATTAA CCAGTGTTCG GCTTTATTG AAGTCTATGC CCTGCACAGC
 TCTTGATGT ATTINAGATG CTAGAAGTTT TTINAGCATG TNATGTGTA TTCTTGTTG AATTCTAGN ACCTTGTTCA
 ACTTGTCTT TTTTCAAGGT TGTTTTGGGT ATCTGGGTC CCTTGCTTT CCATATGNAT TINAGGATCA GCTTGTCAAT
 ATCTGCAAAA AAAAAATCAG CTATATTTG ATAGAGNITT GTATTGCATC TTTAGGANTG GTTTGTGAG TATTGCC

SEQ ID NO:926: (Length of Sequence = 247 Nucleotides)

GTTATTCATA CCACAGCATT TAAAAAGCAA TCCGCAAGIN ATAAAAAAA AAAAAAAA ATGATGTGAC ATATCCATTG
 CCTGANITGC CTCTTTTGTG AGCCAGINIT GGGATTATAG CAGAGGAGTA GCAGAAATAA NTATATTCAG ACACAAACAT
 ATAGATATAA TAATATCCAA CCNCTTTATA TGATTTAGGG TCTCGTTAAA ATGGTTACCA TTTGCTCTC CTAAAAITA
 TATAAT

SEQ ID NO:914: (Length of Sequence = 389 Nucleotides)

TTACAGGCGC CTGCCACCAT GCCCGCTAA TTTTNAGTAG AGATGAGGTT TCACCATGTT GGCCAGGCTG GTCTCAAACCT
CCTGACCTCT GGTGATCTGC CCACCTCAGC CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CGACCGTGCC TGGCCTTCTC
CACTGTTTTT ATAGTGAAGA AAGGACACCC AAATTTTGAT CTGGTTCAGC TATTCACIAT TCTATCCTGT GTGGTCTTAA
GCAAGTTACA TAACTTGCCT ATATCTCAGT TTACTTAGCT ATAATATAAA TTAAATGGT CAAATGTTCT CTAAAGTCTT
ACTAGTTACC AGTGTTCAT GGGCCCAACA GCATCTACAT TACCTGAGGA GGCTGGTAGG AAATGCAGG

SEQ ID NO:915: (Length of Sequence = 328 Nucleotides)

CNCCAGCAGA TTTTNATTAG ATGGAAGATA ACAAGCATT A CCNCATAGGT AAGTGGTAAG AAATGGCAAG TACAGCCAAG
CCACAGAGGA GTGAGGACAT TACTGGCTAT GGAATGGGT ACTTATGAAA TCTAAGGGTT GGGTCTCTG ATGAACCTCTA
ACTACCCAGT AAGCTCTTCT CTTTGGCACT CAATATGACC NCTGCTGGCA TGAAAGGGNC TACAGTAGCT ACTTTCAACT
TGGCCAACAG TTCTTCAGT TCTGGTGGAG CTTTGAATCG TCCCTTTGAA GTCTTCTTC AGNIGGTGCT CCTTCAACTT
GACAAGTC

SEQ ID NO:916: (Length of Sequence = 365 Nucleotides)

CAACTTCAAG GTGCTGCAAG AGCTTTCAG AAGATGGGTG TTGACAAAT CATTCCTGTA GAGAAATTAG TGAAAGGAAA
ATTCCAAGAT AATTTTNAGT TTATTCAGTG GTTAAAGAAA TTNITTTGACG CAAACTATGA TGGAAGGAT TACAACCTCT
TNTGCGCGC GCAGGGCCAG GACGTAGCGC CACCTCTTAA CCCAGTTCCA CAGAGGACGT CCCCCACAGG CCCCAAAAAC
ATGCAGACCT CTGGCGGCT GAGCAATGTG GCGCCCCCT GCATTCTCG GAAGANTCCT CCATCAGCCC GAAATGGCGG
CCATGAGACT TGATGCCAA ATTCTTTGAA CTCAAACCA CAGCT

SEQ ID NO:917: (Length of Sequence = 400 Nucleotides)

GCATTATTTA TTGAAACTA TGTATTTTT TGIAAAAACC TGATCACATA GAGAATATCA GTGGCTATAC CCTCTCTGGG
CATCAGTTTC CTCATCTGTA AAGTGGGAT AATCACAGCC CCCACCACAG TGGGCTTCAG GGAGGAATAA ATGCATTAA
ACATGGCAAG TCAATTAGGA CGGTGCTGA CAGGCTGTA GCGCCCAAGG TTGTGACTTT TGCTTTTCTT ATGTCTACTC
TGCAACCAAC TTTAGATAGT GGTAGANTAA TCAGGAGGCC CTCTTGAATG GGATATTTG CACAGAAGAG GTCCAGACC
GAGTGTGTGT GACATGGGAG CAGAAGACC GGGGTTTINAG CCAGGCTCTG CCACTCATAC GGGTACAAT TTTCAAAGGG

SEQ ID NO:918: (Length of Sequence = 348 Nucleotides)

CTATTCACA TGGTAACTCT GTCATACATC TATAAAGCCT AGTAGCTGTA TTGGGTGAGA TGAAAAAAC TGCTTATATT
CCACAGCAAC ATAATTACAA ATAAGTTTTA ACCTATTAAA GTACAGAGTC TCTCTCATCA CTTTCAAAGC AGGACCCCTAC
TTACCAATAA TTCATAGCAT ACCTCCCTT ATTTTAAAC TCATATGATA GCTGATTCC TAACTGTAGC AATCAGGATT
CTTAGAAAGA TTGAAACTG AATTTAGCTA ACTAAGGAAG CGGATTTTAT TAAAAATATT GGGTTAGTTT ACAGGAATCA
GTAGTGGAGG AACCAGGGTT GCATAAAA

SEQ ID NO:919: (Length of Sequence = 345 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTAATCCAGA AGTCCTTCTT GGGTGAAAG GAATGAGTGT TTCANACTTA
GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCTCATTTG CTCATGCACA TGTGCTATT GATCAGCTGA ACAGAGAGCT
GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCAAGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTC
ACTCTGAGT AGCAAAAGCA TTAGAATATC ACAGAAGTGA AATNCAGGCT TGAACAGGAC AGAAAAGATA GAAGGAAGTC
AGAGGATNCC ATGGGAAAAT GAAAT

GAATAGAGAA CCCAGCTGAG CGACTCATGC TTNACCAAAA ATACCCAGAG CAGTGTGTCT CTACCTTTTT AAGCCCATGC
TCACTAGTGG GGAAACAAT TTTACCCCC TGTATTAAA TATGGGGATT TCAAGGCAA CAAAAGCATT

SEQ ID NO:908: (Length of Sequence = 207 Nucleotides)

CTTGATACA GGTGGTAAAT TATTACATTA TTTCINCTC CTGTCTACCT GCAGTTGGTT TTATGAGGGG CGTTAGTACA
CTTCCCAAAG GGCTGCCCCG CAGGTNAGA GGTGCACATT GAACTCCCTC ACCAGGCAGA TGGGAAGTGT GGCCATGAGA
GAGAGCTTCA GGGGNCCTNG GNTTATNACA TCGCTGGGCC AGGANAT

SEQ ID NO:909: (Length of Sequence = 339 Nucleotides)

GCAAGAGAAC CTGATATAAT ATCTATAAAT TTGATTCCC TGGGTATATA CAAGTAAATA AITTTTAAAT GGTGCTTAGC
AAGATTGGTT CATGNAAT GAAGCAATTA TGGCTTGANT TTATATGTAC AATATTTATT GTCTTAATTT TAATTTAAAA
CGAATGACAT GTCTCTTTTT TTAATAAAG TCTTCTTTTA AAGATCTTGT AGTTGATGTG ATGAGCTATG CACTGCTAAA
TATTTATCCA CACATAAATA TTGANAAGG AATATGGNAT AGTCATGGGA TGTAGTTTCA TCTCAGTGCT CCATGGAGGG
AGTGTTTTCA CCTCCTCT

SEQ ID NO:910: (Length of Sequence = 372 Nucleotides)

CTCAACTGCC ACTCACCTAT CTACCATCCA CTACCCANIN ACCACCCACC ATGACCCACC ATTGCCATC TACCCATCCA
TCCATTCTAT AAATAATTAG TAAGCACTTA ATGCATGCTA GGTATTATTT TAGGCACCAG TAAGACAATC ATGGGNAAAA
AAGACAGACA ACCCCGACC CTCCATCCT CAGGGAGCTC TATTCCAGTG AGAACAATCA ATGTGCTAGA TTGTGAAGGT
CATCAGTGCT TGCTGCCCCG GTAAGACTGA GGTTCACAG CCGAGGACC AGCTGGGCC AGGGCTTCCC AGGGGTCINC
TAAAGGGGA CTCTCAGGAG TCCAGCTGCT GCCCCTTAGC TNAGCACTG GG

SEQ ID NO:911: (Length of Sequence = 377 Nucleotides)

GAACITCAA AAAAAAAAAA AAGAGGATC ATAATAAATA TTINACTGTC TAGTCAACC AATTATGAA GCCTGATTAT
CTAGCTNAGC CTCGGAGAT TGCTACCGGA AATCTCCCA GATGTTCCC CTCTAACCT AACINTCCAC TGINTGCCAG
GAAGCAGCC GGGCATCTGC ATTCCGAAG CCCAGCTGCT TGGGAAGAGA GAGGGAGCG CCTGCACGTN ACTCAACAGC
CCTGCTGCT AACCAGTTAA CCAGTTCTCA GTTGGGTICA CGACCCATG AGCGACCCAG CTTCTTCCC CTCAGGTGA
TATGTGCTC CAAGCTNGG GATCCCCCG GGGACTATGT GGAGGGAGAG TTCTTA

SEQ ID NO:912: (Length of Sequence = 370 Nucleotides)

ACAATCTACT TGCTACAGAA TCAGGATGTA TTNCCTATT TATAATAAAC TACAGAAGGT AGATTTCAAA GGTAAATGGCT
GTTATGGAAA CCTACTGAG GTGTCTGCT AAAACCACT CAGTGTGCAA AGCGAAATAC AATTNCTACT TCAATAGCTC
CTCACTGCT ATCTGTCTGT AGATTTTATT TCAGTAAAC TGTTTACTAT TTCATGATGA GTAGCTAGAA TTAAAGCATT
AAGTAGCTTG AGAAAATAAT CTATATAAAT CTTTATATCC TACATATGGC TATAAAAATA AATTATATAAT TTTAAAATT
GTTTTAAATA AACATTATT TTTACCTA CCAAAGTAAA GGTATACAG

SEQ ID NO:913: (Length of Sequence = 313 Nucleotides)

GTATCTGGTT GCCACATCCA AGAAGAACC GTGCNINTCG CTGGTCTTIN CTTTCTCTA TAAGGTGGTG CAGGTNTTTT
CCGAGTACTT CAAGGAGCTG GAGGAGGAGA GCATCCGGGA CAACTTINTT ATCATCTACG AGCTGCTGGA CGAGCTCATG
GACTTGGCT ACCCCAGAC CACCGACAGC AAGATCCTGC AGGAGTACAT CACTCAGGAA GGCCACAAGC TGGAAACAGG
GGCCCCGGG CCACCAGCCA CGGTNACCA CGCGGTGTCC TGGNGTNCG AAGGCATCAA GTATCGGAAG AAT

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CCAGGATGCT GTGTGTAGGC GTGGGAATNT GTGCTTGGGG CAGACTTAAA CGCCATTGGA CAAATAGGAC ACTGTGTAGAA
GACTTCACAG TGAGAACCTT GAATNTAAGA CTTGAGAGCA GCCACATCAG AGTACACAAC CATTGCAAAT GCACCACATC
GAAAACCAAC TCTCCTCGTG TAGINCAGAC AGTTCTTTGT GGGGTGGGGT CTNGGAAGGT G

SEQ ID NO:902: (Length of Sequence = 331 Nucleotides)

GGTGGCCAGT GATCTCCTTT CTTATCACCT ATAGACAGCT TGCCTACAGG AAAAAAGAAA GCCAAACACA GACAAGCAGT
ATGAGATACA ATGAGCGCCC TTGGGCCATT AAAATATGAT TGTNTGCCCA AGGTGCGCTG GNCIGCAAAC AGCTCTCCAG
AACCTGCAGC CAGCACAGAC CAAAGTCAGG TTTGINTCCT CTTCTGTGTA TGAACAAAGG TTGATTCCAT ATGTGGCTA
TTGTGAATAG TGGCAGTAAA CATGGCAGTA TTGTATGAAA ATATNACAGA TTAGNCCCTT TAAATATGTG CACTATGGNT
GATCTATCAA A

SEQ ID NO:903: (Length of Sequence = 389 Nucleotides)

AGCAATACTA AACATAAATG TAAATTGGGC TAAATGCTCC CAATTAAAG ACACAGAGTG GCAAGCTAGA TAAGGAACCA
AGAGCCATTG GTATGCTGTC TTCAAGAGAC TCATCTCACA TGCAATGACA CACATAGACT CAAAATAATG AGATGGAGGA
ACATTTACCA AGCAAATAGA NAACAACAAA AAATATTTCT AATAGATTTC TGTCTTTAAT AATGAAATAT GTCAAACCTC
TATAAAACT ATATGTAGGA AATATAAANG TTTATATATA ATTCATGTAA TGTNTAATAG TAACTGAATA GCTAGTATTG
AATAACCAAG CTTCTTTTGG TTGTTTIGNA CATTGGNGNA ATTGAACATG CTTAAAGGTA TTGGGAAGG

SEQ ID NO:904: (Length of Sequence = 285 Nucleotides)

AAATCAAGGA CCGTTTAGAT AGATGATGGG CTAGGCAGGT GGGGGAAGAC AGAGCTCACT GCGCTNTGGG GTCTCTGTGG
GGCCAGCCCC TNATGCCCAT GTGGCCACTN ATGCCAGCT TCCCCAACA CCCCANCACA GGCCAGGTC AATATTACAA
AAGTGAACAA ATGCAACCTG TTTCTGCTTT NACAAATGAC ATGTCTCCAT CCCCAGCCAG CAGGGGTAGG GGAGGNOGCT
TGAAAGTGNC ACTCCGGTAA AAAAGGCAAC AACTTTTATA AATG

SEQ ID NO:905: (Length of Sequence = 374 Nucleotides)

GAAGCAAAAA GTTGAACCTT TTAAAGTGCT GAACACAAAT CCAAATTGGA ATGGTTCAAG CAGCOGTGAA ATCGCTCTTC
ATAAAGTGGG CTTAATCTC TAGTTAAGT TCTTTTGATG GAATGAATTA ATTAATGTGT CAGGTGGCTT ATTGTGGAT
GCCATGATTG ATGATGTTC TTTTAAGCTC TTACCTATAG TACAAGTACA TGATGCTACT GAATATTTTT TCCACTTGGA
AACTGTGAGC TGGGTTGTGT CATTAACA CACATACANA CANAATCANN AAACACTGCG GACTTTTCAC TCAAGCTGGG
TCTTTCTTC CCCAGTGGTA AGGGCAAATC CTGSCCTANC TAACCAACAC CCAC

SEQ ID NO:906: (Length of Sequence = 375 Nucleotides)

CTGACTGAAA GGCCTTTTCC AGCTCCAACA CATGAAGGTT CCATAATTTT CCCCAAATGT CTGCGCTCT GAAAACTTCA
ACTATCTTAA TATTGTGAC ATTTATGCCT GTGTATGGCA ATCTGATGAT AAAAGGAGCC ATATGTAAAT AATAACTGAA
ACTTGTGCAA AATAATGTTA AGGAAACATA ATTAGCAAAG CAATATATAA TTNCAAGTCC ACTGATTTAG AGAATCAGAA
GTACANTTA GAATCAGAAA TAACAACATAT CTGGCAGGGA TGGAAAAATG AGAGCAGATA TAAAGGTGT ACCCAACCC
CTGACCCAC TGCCCATTTG GGTGTGCACT ATGINTTCC AATATTAATA TCTTT

SEQ ID NO:907: (Length of Sequence = 390 Nucleotides)

GTGCTGACTT CAGCAGCCCT CTGAAAGGCC CCTTCCATAA GCTGGGAAAG TATGATCATG GTTTCATCAT CTTGTGTGGT
TATTACTTCA AGGTGACCA ATCTGAAAGC TCTGTGTGAA GAAGGGGACT GAGTGGCTGT GAATGATGAG ACCGTGTGTT
AAAAGCCAGG CTTAGCCTGA GGTCCGGAAG AAGCAACCTC AATGCTGTGC TTTACCATAG CACCACCTGC AGGTATCCAG

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ATGTATTAGA ATCCCTTTT ATAAAGGATA AAGGTGAGGG TCAGAGAGAC TAGGAAGCCT GTNCAGGGTG ACACAATACA
AAGTGTGATA AATGGGTTT GTAATCAGCC ACTCTGCTTA TTAACATCAG CAGTATGGTT AATGGGGTGA CCG

SEQ ID NO:895: (Length of Sequence = 304 Nucleotides)

GGTCTAGATT CAGTATGAA TGTAGGCATT AGTTAAAT AACAAGATGC AGAGTATTAA TTCTTAAGA CAACAAGTG
ATTTCTGTAA GTTTGAGCCC TATGTGGAAA GCATTGTGGA ATCTTAACCT TTTGTACAC ACTCTGTGG GACGTATCAT
ATAAATGTCA GCACTAAGTA ATGCTTGTT TGTGGCTGAA TATTTTNCGT AGATGTTTT GAAGTTGACA TGACTTACGT
GCATTTAAAT ATATATTGCC ATCCCTTAGT TTGTAATTAA GGATTNGGA ATATGGGTTG TGGG

SEQ ID NO:896: (Length of Sequence = 337 Nucleotides)

GCAAAGTATT TCATCATATG CATGTACTGT ACCTTATTTA GCCAGCCCCA TTTTGTGTTGG CTGTGGGAGA ATTACAATAG
CTGTTTGTAC TGTGTATCA CATGCCAGGC ACTGTACTGT GTATTATCTC ATGTAATTCT CATAGTTACT GCATGGTGTA
GGTATTTTNA TCCCCAGTTT ACAGGTAGAG AAAGTGAACC CAGAGATGTT AAATAATTG CCCAAGTTTT TTGGCTGATT
ATACTGATGA AGATACTGAT ACTAGCATTG TGTGTGAGT TATTTGCCAG ACAGAACTCT TTATTTTTTA ATACATAATA
TCCATTTACT CTTGAGG

SEQ ID NO:897: (Length of Sequence = 316 Nucleotides)

NATCACTTNA GGTGAGGAGT TCNAAACCAG CTTGGCCAAC ATGGCAAAAC CCCGTTCTA CTAAAATAC AAAANTNAGC
CAGGTGTGTT GGTATGTGCC TGTAAATCCA GCTACTCAGG AGGCTGAGGC AGGAGANTCA CTGAACAGG GAGGTGGAGG
TCGCAGTGAG CCGAGGTTGC AGTGAGCCGA GATTGCACCA CTGCACTCCA GCGTGGGCGA CTNAGCGAGA CCCTGCCCTCA
AATAAAGAAA TAAATAANTA AAGTGGGGAA GTTAGTGGTT TCTGGTGTAT TCAGAGTTGT GTACCCATCA CCCTGG

SEQ ID NO:898: (Length of Sequence = 200 Nucleotides)

GAGATCTGGG GCTGGGTAT GGATGATGGG GGAAGGGCG GTCGCTCTG CCACTGTCAG GGACCAGCCG GCCAACGCCC
ACCGNAAAG GTGTCTAAA ANTINAGCTT TTCACCCACC TGCCCTTTC TTCAATCCC ACGCTGTTT CTTCAAAGT
TCTGGGAGGA CGAACTCACC GAGGCGAGAA GTNTAACATT

SEQ ID NO:899: (Length of Sequence = 264 Nucleotides)

CTCTGTAAGT TAGCGTTCAT GTTTTCAGCC CCATGCAAAG GCGCAANACN TCAGACAGCG TGGTTCNTN AACATNAGTG
TGTGGTGCTT CCCAGGAGCA GGGATTNAG CNAGGCTGCT GACACATAAA CACACCCCA CCTCCAGAAG CAGAGGAGAG
GAGCCAGGG CCAGGCGAGG TAGCTCAGCA AGGACCCAGC ATGCTNCAGG TGGGGCCAGT AAGAGTCACT TCTCCAGCNA
GGTTCAGAGA GGAGAGAGGC AAGA

SEQ ID NO:900: (Length of Sequence = 265 Nucleotides)

GCAAATGGTA AAAAACAAG TCAGCAGAAG AAATTAGAGG AGAGACCAGT TAATAAATGT AGTGATCAAA TAAAGCTAAA
AAATACCACT GACAAAAAGA ATAATGAAA TCGAGAGTCT GAAAAGAAAG GACAGAGAAC AAGTACATTT CAAATAAATG
GAAAAGATAA TAAACCCNAA ATATATTGA NAGGTGAATG CTGAAAGAA ATTTCTGAGA GTAGAGTAGT AAGTGGTAAT
GTTGAACCA AGGTTAATAA TATAA

SEQ ID NO:901: (Length of Sequence = 381 Nucleotides)

CTTCTGTGCA TATAAAGAG AACAGTCTGG NCACTTGAAA ACAGACACCT TCTGGTTTTC AATGTGTTGG TCAAAGTGGC
GATACAGCAA GGTTCGAGG GTGAACACAG TGTCGCACAT GGAACACTTA TATATNATT TNGGTTCTCC TATCTTGATG

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ATCTTGCATG ATTAATACTA TTGGCCTGIN CCCTTTATCC TCAGCTGGTT GTACAATTCT TGAATGCTTT CTCTTCCCC
 TGAGGATGCT ATAGATATTG TOCTACTGIN ATCTGAAATN AGTCGTTTGG GAGAAGTTTC TOCATCCAGA TACCTATAGA
 GTCTGCTTTT TTTTTTTTTT TTTTTTTTTT ATATGCAAAC NCTCGCTGTA TTATTGAGGC TGATCTGAAT CTCTGGNCT
 TTAGTGTTGT GACAGCTTG GCTCTTAAA ACTGCAGNT TACAGGCATG AGCCACAGTG CCTGGCCATC AAGTAGCA

SEQ ID NO:889: (Length of Sequence = 349 Nucleotides)

ACAGAAATCT ACGTAGACTT CTNCCAAATG CCACATGAGA GCAGTGGCAG AATACAGAGA GACCGGCGAC CACAGCAAGG
 AACTGTAAAG GCCAACAGTC CTCAGGCATG CAGGCTGGG CCAACAGCAC AACGCAGAGT CGCTTCTTCT CAGTCCAGCA
 ATTAAAATGA CCATGGCAGC CAGGGTTTCA TTAGGTTACT TTCAAAAACC ACCTTTGCTG GAAAAAATGT TTGGTAGTTT
 AATCTGCATA TACGGACAGT CATGCACCAC ATAATGATGT TTAGGTCAAC GATGGACCAC ATATTCAATG GGTAGTCCCC
 TAAGGTTTAT AACCAGCATA TTTTTTACT

SEQ ID NO:890: (Length of Sequence = 341 Nucleotides)

GINGTAGGGG TTCTTAGGTA GGGCTAGTAG GTAGGGTTAG TAGGTAGGC TAGTAGGTAG GGCTAGTAGG TAGGGTTCTG
 AGGTAGGGTT CGTAGGTAGG GTTAGTAGGT AGGGTTCTGA GGTAGGGTTA GTAGGTAGGG TTCTTAGGTA GGGCTAGTAG
 GTAGGGCTAG TAGGTAGGC TAGTAGGTAG GGTAGTAGT TAGNGTAGT AGGTAGGGCT AGTAGGTAGG GCTAGTAGGT
 AGGGTTCTGA GGTAGGTTC GTAGGTAGGG TTAGTAGGC GTCTNCTCTT CTCCACCTT GGNINCTTGT AAAACNTTAT
 TTTACAAGCA ATAGGAATTT G

SEQ ID NO:891: (Length of Sequence = 344 Nucleotides)

GACCTGGCTG CGCACCAGGA CGCCTGGAG CAGATGCCG CCAITGCCCA GGAGCTCAAC GAGCTGGATT ACTACGACTC
 CCACAAATGTC AACACCCGGT GCCAGAAGAT CTGTGACCAG TGGGACGCCC TGGCTCTCT GACACATAGT CGCAGGGAAG
 CCTGGAGAA AACAGAGAAG CAGCTGGAGG CCATGACCA GCTGCACCTG GAATAAGCCA AGGCGCGGC CCCCTTCAAC
 AACTGGATGG AGAGCGCCAT NGAGGACCTC CAGGACATGT TCATGTCCTA TACCATCGAG GAGATTGAGG GCCTGATTCT
 CAGCCCATGA CCAGTTCAAG TCCA

SEQ ID NO:892: (Length of Sequence = 367 Nucleotides)

CTGGGCAACA TGGTGAACCC CATCTCTGCT AAAATACAAA AATTAGCTGG GTGTGGTAGT GCTGCTGT AATCCCAGCT
 ACTGGGAGG CTGAGGCAGG AGAATTGCTT GAACCTAGGA GGTGAGGTGG AGGTGCACT GAGCCAAGAT AAAAAGAGTG
 AGACTCGTC AAAAAAAAAA AAAAAAAAAA TATATATATA TATATATATA TATATTNGN CTCCAATCCC ATCTAGGTG
 CTGCAAATGC CATTATTCA TTCTTCTTA TGGCTGAGTA GTTTTCCACT GTGTATGTAT ACCACAGTTT ATCTTCTGT
 TGATTGATGG GCGTTTGGG TGGTTCCACA TTGTGCCAG TTGCAA

SEQ ID NO:893: (Length of Sequence = 220 Nucleotides)

GCAAAATATT TATTCCAAGT TAGTTATTT ATGCAGTAGT TTCCCCCTGG AGACTTGIGA TAACCACATC TTTTAAATCT
 GTAAATAATG TTATCAAAAT AATCTTAATC TTGAAATCT CACAAAAT TATATTTTAC AATCCACCT GAATATCAAG
 GCTGCAAGAN TAACACAACA TTCTTATAT CCAATATTT TACAGCTGTA CCCAAAAGG

SEQ ID NO:894: (Length of Sequence = 313 Nucleotides)

GGGATTGGGA TTGTTTGGCT CTGAGGCTGT TAAGTCTGGA CTGATGCTGG AACTAATAT CAATGTTTAA CAGGGTTGAC
 TGTCATTAAT GATGTGCTTA GCTGTGGGTA CAGATGCTTT GCACATTAAT ACCCTCTATT CTCACAATCT TCCATGGGG

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TGCCATTAGC AACACTGTTC AGATGAGATA ATTAAGAAAA AAAGCCAATT GAATGATTGA GTGAATGANT GATTGAAAAT
 CTTTCCGAAG TTATAATAAT AATTGTGATT ATTGGGGTCA AAGCAAAACC ATTTTAGTCT AAAAGATTGT AACTATATACC
 AACTTTTACC CAATTITGGAA TGAAAAATTA CATTTCCAAA CCATGTAGAA ATTCTGANCT CTTTGAAATA TTCTCTTTTG
 TGGGAAAGAA CCAGAAATTC TTTGTATAT GTACCCATTT ATCTTATTIN AGTTACCCAA CCAAAAGATA AAATAATATT
 CTCAAAGAGA TAATTGACTG GAGGAGTTA AAGTGTTTAT AAATATTAG

SEQ ID NO:883: (Length of Sequence = 369 Nucleotides)

CTGCCATAAG AATATCAGCC TGGGGGCAGT CCAGACGCAG CCCTTTGTCA TCCTTTCTGT TTGCCTAGTC TCAGCAGACT
 GTGATCACAA GGCATTGTCT GTGGGATTTT NCCTTTCCCT TTCTTGATCT CTCTTGTTGT TCTAGGTTGT TTGGTTGTTT
 ATTGTTATGG TGGCTTTTNA TTTTAACGCC CCTTGAGCCC CATGATGGCT GGTGTCACCC TGTTCTTTTA CACTGTTGGG
 CCAGGTGCTG CTGTCTCTTC TTAGGGCATC ATCAATTCGA AATATTTCTT TTTGCTCCCT TTATGAAGAT GTCTTTATAC
 CCTTGCTTTT CCATATTTT TNTGGGCCAA GCAATGCCAT CTNCTTTTA

SEQ ID NO:884: (Length of Sequence = 327 Nucleotides)

AGTTCATCTT TTTCCAGAGG GGTCTGGGTG CCTTTAAAGG GGTGCAGGCC GAAGAAGATG GTGGCTTGGG GAAACTGGAG
 CTGAACITGG ATTACAGAACT CTGAGGCACC GGGATGGGGA TGGGAATAGG GACTGGCACA GGCAAGGGGA CGATTACAGG
 ATACGGCACC AAGAGGGTGG CTGGTGGGAC CAGGGGGGAC AAGGGGGAGC TAAAGGCTG TGGGGGCACA GGGGCATAGC
 CAGGAGGAGG CTGACAGGGT GGGGGCCCGA GAGTGCCCTG GGAGGGAAAC AAATTCCTGA GCACAGCTTC AAATGGCAAA
 GTGGGCT

SEQ ID NO:885: (Length of Sequence = 380 Nucleotides)

CCAAAGCTT ATCCACCATG ATCAAGTGGG CTTATCCCT GGGATGCAAG GCTGGTTCAT TATATGCAAA TCAATAAATG
 TAATCCAGCA TATAACAGA ACCAAAGACA AAAACCACAT GATTATCTCA CTAGATGCAG AAAAGGCCTT TGACAAAATT
 CAACAACCCT TCATGCTAAA AACTCTCAAT AAATTAGGTA TTGATGGGAT GTATCTCAA ATAATAAGAN CTATCTATGA
 CAAACCCACA GCCAATATCA TACTGAATGG GCAAAACTG GAAGCATTC CTTTGAAAAC TGGCACAAGG ACAGGGATGC
 CCTCTCTCAC CACTCCTATT CAACATAGGT GTTTGGGAAG TTCTGGGCCA GGGGCAATTT

SEQ ID NO:886: (Length of Sequence = 400 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACGTA TTACTCCAGA AGTCTTCCT GGGTGGAAAG GAATGAGTGT TTCANACTTA
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATG CTCATGCACA TCGTCTATT GATCAGCTGA ACAGAGAGCT
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACGTTA GCCTTGAGGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG
 ACTCTGCAAT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATACAGGCT GAACAGGACA GAAAGATAGA AGAAGTCAGA
 GATGCCATGG GAAAATGGAA ATGAGGAACC CAGCTTCGCC GACAGNAGGC TTGCCACAC TGATTCACCT TCGGAGATGT

SEQ ID NO:887: (Length of Sequence = 363 Nucleotides)

TAAAATAAAT GCTCTGGATG GGAGAAATGT GGAAGTTACT TTGGAACGTA ATAATAAGTA AAGGCTGAAA GAGTACTGAT
 ATACATGCTA AATAAAACCA ATATTTCCCT GAATGANCTA TTCAAAGCAA TTCTGGTGGG TGTTAGACAG GACATAGAGA
 CCTGGAGAAG AAGCTCCCAT TTTCATAAAG AACACAAACA ATCATGTATA GAATGTTGGT AGAAATATGA ATGGTGAAGG
 TCAATGTAAT GAAGTCTTAG ATGGGAATAA GANAGGTTAT TAGACAAGGG AGAAAAGGTA ATCCTTGTTA TAAAGTGGCA
 AAGGAACCTG GCCTGAATTG TATTCATGTN CTAGTGCTTT CCT

SEQ ID NO:888: (Length of Sequence = 318 Nucleotides)

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CCAGATTTCC ATGTGTGCAG TATTATAAGT TATCATGGAA CTATATGGTG GACGCAGACC TTGAGAACAA CCTAAATTAT
GGGGAGA

SEQ ID NO:877: (Length of Sequence = 404 Nucleotides)

ATTTGGCTCC TGAATGTTGC AGAAAAC TGG TTTGTACAC TGGGGAAGGA GAGAGTGAAG ACCCTCCAGT TGGTTCTCA
GTCAGCTCCG TTCTTGGTGT CGCTTTCTTG CAATTTTTTT CCTCCCTGG CCTTCTGT GAGGGTTAAA AGGGCCATCT
CCAAGCCAGG TGGAGCCCCA ATCCCAITGA CCAAGAGGCG AAGGTATGGG GTCACCTTCT CATGGAAGCC CTCTTCTTAA
AGGAGCCCAA AGGGGACACC TGCAGAGGCG GGGCTGTGAT CTGTGTGTGA ACTTCAACAA AATCTCAGGT TAGTATTTCT
CCAATTTTCA TTGAACCACG ATGTGGTATA CACTACAAAA TGCAGATTCT GGTGCCCTC TCCAAGAGTC GGCCTCAGTT
AAAA

SEQ ID NO:878: (Length of Sequence = 340 Nucleotides)

TGTACCGCTG TGCTGTTGGC ACGAACACCT TCAGGGACTG GAGCTGCTTT TATCCTTGGA AGAGTATTCC CAGTTGAAGC
TGAAAAGTAC AGCACAGTGC AGCTTTGGTT CATATTCAGT CATCTCAGGA GAACTTCAGA AGAGCTTGAG TAGGCCAAAT
NTTGAAGTTA AGTTTTTCAA TAATGTGACT TCTTAAAAAG TTTATTAAG GGGAGGGGCA AATATTGGCA ATTAGTTGGC
AGTGGCCTGT TACGGTTGGG ATTGGTGGG TGGGTTAGG TAATGTTTA GTTTATGNTT NGCAGATAAA CTCATGCCAG
AGAACTTTAA AGTCTTAGGA

SEQ ID NO:879: (Length of Sequence = 372 Nucleotides)

GAAAAGATAA TGAAGGAATA ATGCAAGCT GAAGGCTGTG CCAGATGTAA GAAGTGATTA TGAAGGATAA AAGAAAAGGG
CTTTCCAAGC AGGGAAGAGG CATCAGAGAG AAAACCAATT GTTGAAGCCAG TATTCTGTCA CAGGGACATT TGCTTTTNC
CTTTAATGCC CAGTAAGGCT CTTCTCAGGT TCCATTAAAC ATGCAGAATC ACAAGACCCC CCCAAAGTTA CCATGGTGCC
AACCGACTCA AAACAATACA GACAAGAAGC TCAGCTCATC AGGAAGGCTG CAGCAGGCAT ATGGGAACCA TCTTGCTCCA
CAAAGGACAG CTNAGATGGC AAAGATCCCT ACAAGGGTCC ATATCCACGG GG

SEQ ID NO:880: (Length of Sequence = 405 Nucleotides)

GAGCTAGGCA CCAGGCATTG TGTGAGGCC CAGGAGTTTA AGAAATGAAT TAAATATTCT CCCCTGCCCT CTTTGAAGT
ACTCTAACGA GGAGACTTAA GANTTATTTT GTAATCTCTA GTTATATTIN CTGAATTTCA GAGCTTAAAT ATTATACTTC
AACATGAGTC ACACCTTTAT TTATATGTTG GTTTGTCTCA GCTGTGTTGT GGGTTGGTGG AAGGAGACCA CACATACATA
CACACAGAGT ACATACATGC TGTGTATGTT ACACACATAC TCACACCCCA CAAAGTGAAG CTCCATGCTC ATTTTGTTTA
ACAAAGACTA GAGAGGCCCT GCAGACAACA GCTACCTGGA GCAGGAACAA GTGAAGCATG TTTCTGAACC ATTTCTCAAG
TCACA

SEQ ID NO:881: (Length of Sequence = 336 Nucleotides)

GTCTTTCAG TCAAAAGTCC TTGAAGCTGG GACCCTTTGA AAGTCTGTCA GTTACATGTT GTTGGTAGTG GCTTGTTTTG
ACCGTTTCAA AAAAGGAAGA AAAAACCCT TAAATCATTT TTCTTTCTC TTTCTACTG CAAAGGCOGA CGAGATTGAA
ATGATCATGA CGGACCTTGA AAGGGCAAAC CAGAGGCGAG AGGTGGCTCA GAGAGAGGCG GAGACCTTAA GGGAACAGCT
CTCATGGGCC AATCACTCCC TCCAGCTGGC CTCACAGATC CAGAAAGGCA CCAGACGTGG AGCAGGCCAT AGAGGTGCTG
ACCGCTCCA GCCTAG

SEQ ID NO:882: (Length of Sequence = 369 Nucleotides)

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CAGCTTTGCA AATCAAATAG AATTCAATTTT GCCTCCNCIN ATCTTACAAC TATTCTCTGG AGTAGGCAGG CTGGTTGAAC
 TTCAAGAGAA GAGGCGTTCC TGAGAGCCTC CTGGGTGAGC TTGCACACCT GGGGGCCAGA TGINCTTTGC CCTCCTTGCA
 AAGCCTCTCT AGTCTGGTGC CCAGAGAATA CAGCTTCAGC AGCAGCTCAC TTTGCTTTTN AGTTTAGATG AGAAAAACA
 GCAAAATAGT CCATCAAGGA CAAATTCCTG CCAATGGATT TNCPTTTGCA AGGANGTTCA CCTTTGNNCC TCAAGCATCA
 TCTTAAAGTT GTGAATGCCT GATGGGAGGT CCAGGTGGEN CTGTGGGAGG AGCTNGGGGT GGNITCCAAA ACCACCTGGG
 GACCAGTGG

SEQ ID NO:871: (Length of Sequence = 290 Nucleotides)

TCTTTCATT GATAGATTAG TTATTTATGC CAGINGICTC TGCTGGCTT GTTTTGGTTT TNATTGCATT TGTITGCTAG
 AGATTGTTTT TAGTTTTNCA ATTTCTTTCT CTGTACACCT GCCCTCCCC CACCCACCA CTGGGTACT ACCTCCTTTT
 TGGCACTACA TGATGCCTTA AGCCAGGNT TGCCTAAGCT TTCATAACAG ATCCCAGCAC TGCTCATCCC CAGTGGTGGA
 GGINCTAAAT GGGATAACCT GATAGTGTGG GAAGGCTGGC TGGGGTTGT

SEQ ID NO:872: (Length of Sequence = 313 Nucleotides)

AAAACAAAAC AAATTTAAAA GCACTCAAAA ATAACCTCAA AAAGAGACTA GTGAGTGTCC CTTAAGGAAA GCCCTTCCTG
 CAGATTCCCA CAGAAGTCGG CCCAGGCACT TAACCTCCAT CTCAGCTCTG GTACAGCTCA CTGCGTACAG TGTTACCAA
 ACTCTTATGC CTGNGCTGCT GATAAATTCT ATTTATCTCT GAACCTCAAT TTATTCAAAT CTAGTTATGA TATATCATAG
 TGCTTGTAAAT TGTGTAAAA TATAGANGTA ACATACAGCA TGTTCTTACA CGNTTAATAA ACTGGTGCTA ATT

SEQ ID NO:873: (Length of Sequence = 300 Nucleotides)

TAGTAAACAA GTATTACTTC AACTGATACA ATGGCTACAT GACATCAAAG TACTATAAAT NATCAAAACT ATCGTACAGA
 AAAATTACAA ATTCGTTGCA AAATACATTA TACTGCTACC ATTAAGAAAA AAGTGCITTT NGTTTCTCTT TCTTTCTTTT
 TTTTTTTTTT TTTTGCCAGA AAAGTATTCT TNCATATAG AAAATCCTAC ATGTTACCTT GCATGTGGCT AGENTATATC
 ATAACGGAGT TTGTACTGAG TCCTTCGAT TTGCTGGATG AAGGGCTGAA AAATATATTA

SEQ ID NO:874: (Length of Sequence = 364 Nucleotides)

GAGTCATTGA TGCTGAGAGA TTGTNAAGAA TATACTGACA GCATCCTTGT AGCTGCATCA CAGTAAATCG GACTTCTGAA
 TCAAGCAGCC CAGCCTAGCA GCTGATAAGA GTGAATGTAG GTGAGAAGCA TTACCTTATT CCTGTAACAA GAGAAGTGT
 TTGTGATAAG TGAAACTAGG AATGTAGAAG AAGAAATATC CTATGGCTAT TATAAAGAN GAAGGACTTG CCTGANTGAC
 TTGGTGGTGC ACCAGAAAAT AACTTTCAGA AGAATGCTTT CTGTTAAGCT GCTGCATTGT TCCTGGAGGA AATGTTATTT
 CTAATGCATG TTATTTCTTC AAAAGATAGG ATAACAAAGA ATTG

SEQ ID NO:875: (Length of Sequence = 341 Nucleotides)

ATCAGTCCAA TGCAGATTAG TATCACTTTG CTCATAAAAG AGAGTATAAA GGTTCTTGAA GTTTTTGAAA GGAGCGGCTN
 AGCTGACTGT TAAGGAAGCT ATCTTTTGTG TACAAGAAAT TTATACITTT CCTTCTAAA TTTCACAAAC AGAATATTAT
 TAGAGACAAC AGAATACATT TACAAAAATG GCATCAGAAA TAATTGANTA CATTGTGTAC AATATCINCT ATTAATGAAA
 TAAATGTATA TTTNATATGA TATTTGGTCT TTATGGGAAA ANTAATATAA TINCCAATAT TCTAAGGNTG ANCAAAGNNG
 GTTTACAAAT AGCATGCAAG G

SEQ ID NO:876: (Length of Sequence = 327 Nucleotides)

GTTTCANCTT GTGGGTCAAC TTCTAATATT TGATGGTGGC TACACTGTGA CAAGAAAGGT TTTNAGCTT GTTGGGGTCA
 GTGGATGGG ACAAGGGCAC CCAGTGGTGG TGCCCGGNCC AGGGAGGAGA ATACATTGTA GAATATAAGG TTTGGAAGTC
 AAATTATAGT AGAATGTGTA TCTAAATAGT GACTGCTTTG CCATTTCAAT CAAACCTGAC AAGTCTATCT CTAAGAGCCG

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TTAACCCTG AAGTNGTCTT TAAGGACAAA ACTTAAATTT TAAATGGGT GTTACCATAT TTATGAGTG GACTGACTCC
AAGGTTCCT TGCTCCAAGN NTGGGCATCG TGACATTGCC GTGATGCCCA GAGG

SEQ ID NO:864: (Length of Sequence = 223 Nucleotides)

AAGGGGATAG AGCAGACACT CCGCAGGTNT CTTGAGATTA TCATCOGCTG AGGGTAGAGC TGAGGGTGGA AGGGGAGTNA
GCAGACACTC GGAAGGTGTC TTNAGGCTCA GGGAGTTATC AATTATAGAA TGTGTGTGAG TTGGAGGAGG TGGCTGGTGG
CCCATCCTGT TTTTAAAGT TTCANCTGTG AGGTAGGGCC AGTAGGGCAA TCCTGAAGAA TGG

SEQ ID NO:865: (Length of Sequence = 228 Nucleotides)

GAACCGGGA GGCAGAGGTT GCAGTGAGCA GAGATCACAC CACTGCACTC CAGCCTGGGC AACANAGCAA GACTCCGTCT
CANAATTTIN CCAAATCTG ACGAAAGAA AAGAAACAAA TGGTTCAGAT GGGACGGAGG GTGGGGGAGG GGGGGAGGGT
GAGTAGGAAC CAGGAGGGCT GCCTGGGGTG GGGGAATAAN TTAAAAAAG GAACGAGTTA ACAACAGC

SEQ ID NO:866: (Length of Sequence = 328 Nucleotides)

GCACCACGTC AGAGAGGCC CAGGCCACTG AGCCCGGGAG GAGACCCAGC CGGCCAGCCA GATGTGTGCC TGANTGCCAC
AGACTTCAAG CAGTTTACAA ACGAAACTCA CTGTTAAAG CTGTTAAATC TCATTAAAC AGTAGACGAG TGCTTTAGAT
TCTCTGAATA TCAAATAATA TATACAGATA GACACTGAGA CATGACAGTC TAATCTAAG CATCTTTACA GATGCATTIN
CTTGAAAGT TAGTCTCTT TTTAACTCTG AATCAGTGAT AAAATTGTTA ATTTGCAAAA GAGTACAGTT TTAAGCAAGA
NTAGAGTG

SEQ ID NO:867: (Length of Sequence = 361 Nucleotides)

GTTCATGGC ATGTAATAAT TATGTGAAAT TCAAATTTTA GTGTCCCGAG TTCTACTGGA ACGCAGCCCC TATGTGGTTC
ATGINTTGGC TCCAGCTCCT TTCACACTGC AGCAAAGCAG GGAGTGTAAC GTACACCCCA CGGCCACGGG GCCTAAATA
TTTCCTATCA GACCCCTAGA GAAAAATATG CCGACCTCGG ATGTGACTGA GGGTGGGGAC TTGGGTGAAT GCGGCCAGG
AGTGACATCA AGGGTTTGAA GCAGACCTC TGTCCAGGAG GGAGCGGAGG CAGAGCAGGG ACAGTAGTNA GGAGGCCATC
TGTGGTGACT TAGGCAAGGT GAGGAGGATG TAGGAGGCAA G

SEQ ID NO:868: (Length of Sequence = 364 Nucleotides)

AAAGCAGCCT TCAGGCTACT CTCCTGTGN TCCTGTCTCT GGGGAAGAAC ACTCAAGCAG CTTTAGAAAA AGTCCACGTG
GCAAGGAATT GTGGTCTTTT GCCAACAGCC ATGTGAGTNA TCCATCTTAA GAGTGGNCC TCCAGCCCCA GTAAAGTGT
CAAATGACAG CAGCCCTGGC TAACATATTG ACTGCAACTT CATCAGGGAA CTTGAGCCAG AAAAATCAG CTAACCTGCT
CCTAAACTTC TGACCCACAG AAATGGTGAG ATAATGAATG CTGTGTTTAA GCTGCTAAGN TCTGGAATAA TTTGTATTTC
AGCAGTAGNA TAACTAATAC AANGCCACCC AAGNATCATT TCCC

SEQ ID NO:869: (Length of Sequence = 383 Nucleotides)

AGCGACAGAC AAGTGAGCAT CACTACCAGA GCTCTGCCTC CTGTGAGATC AGTAGCGACT TTAGATTGTC ATAGGACCAT
GAACCTGTG CATGCGAGGG ATGTGGGTG CACACTCCTT ATGAGAATCT AATGCCTGAT GATCTGAGGT GGAACAGTTT
CATCCTGAAG CCATCCCTGT GCCCTACCT GTGGAAAAAT TGTATTCCAT GAAACAGTT TTTGGGGCCA AAAAGATTGA
GGACCGCTGC TCTATAAGAA ACTATTACTG AATAAGGTA TAAAGTCTTT ATCTTACTTA TATTTATATC CTCTATGGTG
TCCACACACA AGGTGCTTTT TACACTTAAG TTGTAAACT AAAATATTNC TTAAACTTT AAT

SEQ ID NO:870: (Length of Sequence = 409 Nucleotides)

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AAAAACAATT AGTAAAAAATT ATGCATTAAAG GAATTATTTA CTAGACTTTTC TGGAAGTAAA AAATAAGTCA GCTGGTTTTTC
 CCTTTGANIT CCTATATATT AAGGCAGAAT TCTCTATACT GTCCACCAAA ATCATAGTTA CAACTGTTTA CTTGAAATGA
 TTTATATACT GCATFGACCT GGCATGTTAA TATTINCTTA TAAATATCAC CACTTATCCC CATGCCCTAA AGCAGTTTTT
 TTAAACCCAT TCTTTCTTGG AGAATAATTA TAATACCTTA AATACAGAAC TTTGGGTTTC TGATCTTGCC ATAGCCATGT
 AGCACAGCCA CTGA

SEQ ID NO:858: (Length of Sequence = 301 Nucleotides)

GGAGAAACGC CTAATGTAGA TGATGGGTG ATGGGTGCAG CAAACCACCA TGGCACGTGT ATACCTATGT AACAAACCTG
 CAGCCTCTGC ACATGTATCC CAGAACTTAA AGCATAATAA TAAAAAANTA AGAAAATGGA AATTGATTTT AAAAATTTTT
 ACAATGTGCA TCAAAAGACA ACATTAAGAA AATTAACAGA NTGGAAGAAA ACATTTGCAA ATAATTTATC TGATGAGGGT
 TTAATATCCA GAAAATATAA AGANCTCCTA CANCTCAACA GCAANAAAAG ACAACCCNAC T

SEQ ID NO:859: (Length of Sequence = 332 Nucleotides)

TGTCCTCACC CATAGAGCTA TCAGAGGGTG CCTGCNATTG GCAGACCCCT TACATTTCCC TTTAATAAAT CACTTCCCTG
 CCAAGATCTC TGTCAGGTT TGAGAAGTCA GAGCATTAA TATTTNCAA TAAATGGTAT GTACATGANC ATCAGCAAGC
 TCCAAGAAAT GACTCGAGGG CCTTNACTA CTCAGAGAAT AAAGCAAAAA TGCCAGGTTT TCAGTGCTTG TCCTTTGTGC
 CAGGGATTG GACGTGTTTT TTGTTAAGIN CCAGCGTTGA GCTATGTTC AGAAGATGGA GCCTTCAGA AATTAATTGT
 AGTGCTTGAA GG

SEQ ID NO:860: (Length of Sequence = 233 Nucleotides)

AAACGNTATG TGATTTTAGC ATTACAACAG TAATTCAGAA ATATCTCANN TGTTACATTG ATGTCATCAN TATTACAAAA
 AAGGAAAAAA AAGTGACAGG CAACAGTGAA GAGCACCAGA GACCCAGCGC ACACCTAAAG TAGACCATGC TCTTTTCCTT
 CCACTGCCAG GTTATCGTCC CGGAAGCCC CCCACCCCT CGCTTCCTC CTCGCTTTC CCTAAAAAA NNG

SEQ ID NO:861: (Length of Sequence = 327 Nucleotides)

GGCAGGTGT CAGCGCCGT TTCACGCCA CGTCGGGAC ATGGTGATTT CAGAAAGTAT GGATATACTC TTCAGAATAA
 GAGGAGGCCT TGATTTGGCT TTTCAGCTAG CTACTCCTAA TGAAATTTTN CTCAAGAAGG CACTGAAACA TGTTTTGAGT
 GACCTGTCAA CTAAGCTGTC TTCAAACGCC CTTGTGTCA GAATTTNCCA CAGTTCAGTG TATATATGGC CTAGCAGTGA
 CATAAACACC ATTCTGGAG AACTGACTGA TGCTCTGCT TGTAAGAACA TACTGCGCTT TATTCAATTT GAGCCAGAAG
 AAGATAT

SEQ ID NO:862: (Length of Sequence = 378 Nucleotides)

AATCAGGTCC ACATTTGTGT CTTGGATGCT GAGTTTCTG AGGGTTTCCA AGACCATCT CTGCGGGGAA AGGACGGCAT
 TGGGGCCCGAG GGTGGAAG GGTCTCTGG CTTCACTGA AGGGCAAACCT GCCAGTGTA GGAGTCCGTC CAGGACAGGC
 AGGCAATNC TCTCGGGTA TGGAGATAGG TCCAACCTGCC CCGAGATGTT GCGAGTGTA ACCAAGGTGT TTTCCCGGAG
 CATCTCCAAG CAGTCCACC ACCACTCCAC TTTTTCGAG CTCACCCCT GGGTCCGTT CCINCTCCTT TTCATAAGTT
 AGTGGTGCCT GCTTCCGGT TCTGGGTGCT TTGTGGGTGC AGCAAGGATC AAGCTTTG

SEQ ID NO:863: (Length of Sequence = 374 Nucleotides)

TCAAATTAAT GGTTTTATTT CCACTGTAA CACTAGCAGA GGAGTCCAAA GCAGACTGAT ATCCATGGAT ATAGTTTAAA
 TGTAACAAAG AAAGAGTTGA ACTATGTACA TTGAAAAAG GAAAGACATT TTINCATACC AACCTTCCC TAGTTCGCAG
 TTTCTGAATA GTAGAAACAA AACACATTTT TAAATCTTC TATCAATTA ATTTAGGACG AAGTAACACA ACTTTTATAA

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ATGTCIGCCA ACTCAGGAGC AGGGCAGGAA TCAAACTTTT TGGAGTTGCT ATCAAGTINCT TGATTTTINCA ATCCCAACCG
 TCOGCAGAAC ACTAGATGTG TGNATGINTG CTGTGTGTGTG CATTTGTAGT AAAGAGGGGG TTGAGAAGTG GAAGGCAGAG
 NCAGGAGTNG GCATCTACCA NGGCATACAT NAAAGACCCCT TACACCAACA CTGCCCTTCC CAGNAATGTG AGTGTATATCT
 GGTTTCCTAA AACCCCTGGGC TGCAGTCCAG ATAGTCATGG TTAGANCAGA TGGTTGAGGA AAGGTTCAAG GCAGTAGGAT

SEQ ID NO:851: (Length of Sequence = 170 Nucleotides)

CATCCAAGAT ACCAAGATAT ATGAGGGAAC ATTNNNTTTA ATAAAAACA CAAAACCACA AATCCAAGAG GCTCAGNTAA
 CCCCAGTAA AATATATACT AAAATACAAG NAAAAGGGAA AAAATGCATG NACACACACA TATAGGCATA TCATATTCAA
 ACAGTTGTTA

SEQ ID NO:852: (Length of Sequence = 256 Nucleotides)

CAAAGTACAC ANGIGTATTT ATTACATTTT GCAAGCACTC TGTTCTACAT TTCAAAAACG CCACCNVCAA GCTGTGGCA
 CATTTATGTA CAAAACAGAT TAATGTATAT GCTGCTACA AAGCACTCTG TGAAAATACA AACTCTAATA CCAGAAATAA
 AAGCCAAAAG TGTCAACATC ATTACATAAG TNGAAAAGTC AGTTTNGAA ATTATCACAA ACTGTTATGN CACGGAAGTG
 AAATACTATA ATATAG

SEQ ID NO:853: (Length of Sequence = 281 Nucleotides)

GTATGNGTT TCTCTCTCT TGCTGCTTCT AGGATATTIN ATCCTTGACT TTAGGGAGTT TGATTATNAA ATGCCTTGAG
 GTGATATTTT TNGGGTTAAA TCGGCTTGGN GTTCTCTAAC ATTCTTATAC TTAGATATG ATATCTCCTT CTAGGTTTGG
 GAAGATCTCC GTTGCTATTC TTTTGAATAA GCTTCTTACC CCATCTCTTT CTTTATCTCC TCTTTACAGC AAATAAGTT
 TTAGANTTGC CATTTINAGG CTATTTCTA GACCTGTAG G

SEQ ID NO:854: (Length of Sequence = 255 Nucleotides)

TCTGTCCAGG ATTATTACCA GCTAAACCAN GTAATGGAGG TCTATGCCCTG ATGAAGAACA CCTGTAAAAG CTGGAAAATG
 TGGCTGTCTT CTCAAATGGG CAGATACCAG CACAANGATA CAAGGATTGT AAAGACTCAG AATCATGTTA CTTCAGAGG
 AAACTANATA AGNTCCAACA ATGAACACAA NATAATANAA CTNAAGGANA TTTGGANAAC ANTGCATAAA CAAAACAAGT
 TTAATGAATG ATTAG

SEQ ID NO:855: (Length of Sequence = 333 Nucleotides)

ATAGCTGTGG TGGTAACCCA CCAGAGTGAG CATGCTTINCT TCTNAGGATA GACGTTGGGT AGTGGGATTG GGGAGAGGCA
 GGACAGAGGC TTCCGTTGTG TCTCTCTAAT TCATTGTTTC TTAAAAAGGA TTGGGCTTA CAAGTTTCAA ATACTAAGAT
 TINATAAAGT CACATGGATT TTAAAAATC ACTCTATGTG ATGTTTGAAA CATTCATATA TTTAAATAAA AGGATTGGTA
 TTATATATGT NCTTGAGTTG CTATAATGTT TTACGGTTTT CTTTGCTTC ACTTTTGAAT TNINCGAGGA TCTCCTGGGG
 GAAGNTTCTAG TCG

SEQ ID NO:856: (Length of Sequence = 230 Nucleotides)

TTINAGACAA AGTCTTGCTC TGTCACCCAG GCTGGAGTGC AGTGGCGCAA TCTCGACTCA CTGCAACCTC CACCTNCTGG
 GTTCAAGCNA TTCTCCTGCC TCANCCACCC AAGTAGCTGG GACTACAGGC ACGTGGCACC ATGCCGACT AATTTTTTGT
 ATTTTTTTTA GTAAAGACGG GGTTCACCG TGTTAGCCAG GATGGTCTCG ATCTCCTGAC CTCATGATCT

SEQ ID NO:857: (Length of Sequence = 334 Nucleotides)

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CTCAGTAGCC TCCACTCCT GATTAGCTGG GACTACAGTG AATGTGTGCG CATGCCCAGC CTAGTGGTAT TTTTAACAGA
TAANTAAGAA TGGAGGTAGT GGCAGAGGTG GAGTGAGANG AGAGACANGT AAAATATAGG

SEQ ID NO:844: (Length of Sequence = 257 Nucleotides)

TTTCCCTCTC GTTGCCGAGG CTGGAGTGCA ATGGCGINAT CTTAGCTCAC CACAACCTCT GCCTCCGAGG TTCAAGCAAT
TCTCTGCCT CAGCTCCCG AGTAGCTGGG ATTACAGGCA TGINCCACCA CGCTGGCTA ATTTTNIATT TAAGTAGAGA
TGGGGTTTCT CCATGTGGT CAGTCTGGTC TCAAACTCCT GACCTCAGGT GATCTGGCCA CCTCGGCTC CCAAAGTGCT
GGGATTACAG GTGTGAG

SEQ ID NO:845: (Length of Sequence = 420 Nucleotides)

CTACACAT CTTGCATTAC CTGGCAGTAA GCTTGGAGAG TAAGTTTTC AGATGCAGAT CAGAAGAGAT TAGGAAGAGC
TTTGACAGATC ACCGCAAGTA TTTGTATTTC ACTCTAAATT AAACAGAAAA CCCAGGAAGG GTTTTAGGCA GATAAATGGC
ATTATTAGT TTTGTATTTC AAGTCATCAT TTAGGTTACT GGGGGAGGCT GCCTGAAGT GGATCAGAAG TAAAAGGCAG
AGATACCAGC TAGGAAGCTG TTGCAGTGAG CCAGGTGAGA AGAGAGGGCC ACCTGGACCA GGTAGAAGCA GTACAGGTGA
AAAAANTCAG AACTTCCAA ATCTTCCTCA AGATTINATA CATTATTGG CTGGGCACGG TGGGCTCACA CCCGTAAATC
CCAGCACTTT TGGGGAGGCC

SEQ ID NO:846: (Length of Sequence = 215 Nucleotides)

GNCTGGGTGA CAGAGTGACC CTGCTCAAA AAAACAGTGA TTGTTGTAA GGAAATTATT AAAACCTTGG TTCAATATCC
AATATCTTAA CTTTAAATTT TCAAATACTT CAAACTAGT AAGTATTACT ATGTCTAAG CACAGTGCAG TCCAACGGAN
TATGTAGCC ACATATATAA TTTTAACTAG GCCAGTAGTC ACATTAATAA GAAAA

SEQ ID NO:847: (Length of Sequence = 266 Nucleotides)

ACACGAAGAA TCTCTTCAT CGCCAAACAG CTTTCAGAGA TAGATGCTTT GTTCCAATC GAGCATGCTA TTCCAGTGTA
CTGNACATAC TGTACCTC GTGTAGGCA CCTTTATGAA GAGATNAAGN CACTGGCATT TCAGTGGGAT TTAAAGCATT
TTTAATAGCT TCATGTACAG CATGCTGCTT GGTGNACAAT CATTAACTCT NOGATATTTC TGTAGCTTGA NIGTAACCGN
TTTAAGAAAG GTTCTCAAAT GGTITG

SEQ ID NO:848: (Length of Sequence = 275 Nucleotides)

CNCTCGGTC CCCTTTAAA AATTACTTTT CAGCCGGGCA TGGTGGCTCA NGCCTTGTA TTCCAGCACT TGGGAGGCT
GAGGTTGGAG GNTACCTGA GNCGGGAGA TTGAGATCAG CTGACCAAC ATGAAGAAAC CCCGTCTCTA CTAAAAATAC
AAAAATTAGC CGGGCGTNGT GGCACATENC TGTAATCCAG CTACTCGGT GGCTGAAACA GAAACCACCA ACGNCTGACC
TCAGGGAGAT GTCTAAGAGC TTCTGGCATG CCTCA

SEQ ID NO:849: (Length of Sequence = 318 Nucleotides)

GGAATTTTNC TAGTGAGGAG TGGAGGAAGG GGGCCTGGTG GAGGAGTAGC AGCCTTINCA AAGGCCCTGA GGCAGGAATA
CCTGGGAAGT GGGGGCGTGC TTGTNTAAGA TGAGGCTAAA GAGGAAGGCG AGGCTTTACT TAGGAGGAAT GGAAGCCAC
TGAGTGTTAA AATTAAAGC AGTNGGGCT GGGCAGAGTG GCTTACACT ATAATCCAG TACTTTGGGA GGCCAAGGTG
GNTGGNTCAC CTGAGGTCAA NGAGTTINAG ACCAGCCTNG CCCAACATTG GGCTCTACTA AAAGTACAAA AATTAGCT

SEQ ID NO:850: (Length of Sequence = 320 Nucleotides)

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GGATTACAGA CGTGAGCTAC TTCACCTGGC CTGTGTGGCT CTTTTTCAAA AAAAGTTTAC TNGACTCTTG CTTTATTGCA
AGTCCCAGAA TGGATTTGAT TTAGGGA

SEQ ID NO:838: (Length of Sequence = 275 Nucleotides)

AATTGCCAAG GAAAATTTTA TTTTAGCTTT GCATTACAT ATTCTAAATA ATCCTTTCAC TTAATGCAAT CAGATTCTCG
TGACAAGCCA AATACTTGTT TTTTGTGTG TGIGTGTTC CCCCTACCTT TTCATGTAT GCCCTCAGA AAAATCTGAG
AAGTGGGCTT CCATTTTGA AAAACAGGAC TTCCTTAGTA CCATAGATAC GTAGATTGCA ATTTNCTTT TCCTGCAGCA
TTACTGACCT TGTGAAATGA TGCCTATGGA TACGG

SEQ ID NO:839: (Length of Sequence = 387 Nucleotides)

TTTTGIVIT GTGTGTAGAG ACTGGGTTTT NCCATGNNCC CAGGCTGGTC TTGAACCTCT CGGCTTAAGC NATCCTCCTG
CCCTGACTTC ACAAAGTGCT TGANTTACAG GTGTGAGCTA CCACGCCCTGG CCATGTTTTT TGTGTGAAG GATCTGTTTA
GTTTTATAIC TTTCTGTGGC TCATATCTAA TTAGTTGAC AGTACCTGTG GGTCACTAGG TAGACATTGC TAGCAGACGT
TTAGAAATGA AATACTAGAG CTTGGGAAAA AGTTGATATT TGAGATAGAG ACTTGAAGAA CATTAGCAGA GAGTTGGTAG
TTAAGGTCTG TGAGCTGGTG AGCAATCAA AATAAAGCA GAAGAGAAGA GGAAGACAAG GGTCAAC

SEQ ID NO:840: (Length of Sequence = 367 Nucleotides)

GTACTAAAGC CATGCAGGAA GGAGGAATA ATCAGTGAGC CACGGGCTGA ACTTGTGGAA AAGAAATGGA GGGCAAGGTC
ACAAACCACT CCCTAAGTGC TTCTAATTTA ATGTAATCCT CACTGTTTGT CATTATTGCT TTTNATGGCC ATGAAATCTG
TTTTTCCCCA GTNCTCTAGT GTAATTGGA ATTAATTTCC CAGCTGCTTT ATTTTTTCC TAGAAGAGTC GGGGACATTT
TCAGGATTAG TAGAGGTGTT TCTACAACAC CTTCATGCTT TCGATAGTGT GTAAGAGTTC ACCAATTGAN TTACCTTATT
CTGTTCAAGG GTAGTAACTA TGGAGTTTAA CCACTCTGGG ACATAAT

SEQ ID NO:841: (Length of Sequence = 346 Nucleotides)

TGGAAGGAA AAGCAAAAGA TTGAAGAATA AAAACATTTT GTATTGGCCA AAACCTGINC TGTAGCAGTA AGTGTGAAC
AAGTTTGCTA CATTTTCCTT TTGGTTTGA CTGGTTGGG GCCTTTTGT TTGGTTGGTT TTAAGGATT TAGGGGATTG
GCAAGTCAGT TTGTCAGATG TCAATGAACA GAAAACCTAA GAAAAAGGT AGCAAAAGTN CTGCTGGCCC CAGATGGATT
TTNCTTAAG TAATTTCTTA ATCATTAGTT ACAGCTCTGT GTCAAAAGAT GTACATAGAA ATTTATGCTA GATTCTTAAC
ATCTTTCCTT ACTGTGTGCA GAAATG

SEQ ID NO:842: (Length of Sequence = 326 Nucleotides)

GTCTTTTGAA ACAAACGAGA ACAAAGACAC AACATACCAG ANTCCTGGG ACACATTCAA AGCAGTGTGT AGAGGGAAAT
TTATAGCACT AAATGCCAC AAGAGAAAGC AGGAAAGATC TAAATTTGAC ACCCTAACAT CGCAATTAAA AGANCTAGAG
ANGCAAGAGC AAAGACATTC AAAAGCTAGC AGAAGGCAAG AAATAACTAA GATCAGAGCA GAACTGAAGG AGATAGAGAC
ACAAAAAACC CTTCAAAAAA TCANTGATTG CAGGAGCTGG TTTTGAAGAA GTTCAACAAA ACTGATAGNC CACTAGCAAG
ACTAAT

SEQ ID NO:843: (Length of Sequence = 380 Nucleotides)

GGCCTTCAAA TTACAAAAG CAATTTACAT TATAGTAATA GTTCATGTTT ATAGTACAGG AACAGAATG AGTTAAACTA
AATATTCCAA ATCAGTACAA GTNATTNCT TTTTTTTTT TTGAGACAGG GTCTCACTCT GTACCCAGG CTGTCTTGCT
TTGTCATCCA GGCTGCAGTG CAGTGGAGTG GTCACAACTC ACTGCAACTT CAGCCTCCTG GGCTCAAGCA AGCCTCCAC

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SEQ ID NO:832: (Length of Sequence = 402 Nucleotides)

CTGTTTCTC CTTTTGTTT CCTATTTATN CTCCAGTGC TAACITGATA TCINCTTGIG TGTACACGIG TGINITGIG
 CAAATATATT TCTAGGAACA AGAGCAAACA TTCTAGTAAC TATCAITCTC TGATGTGGAG AACITGGGCA GAGATCTGAG
 TTACAGCTTT GTGGATTAT TCTCTCTGAT GAGAGATCGC CCCTTAGAAT GTCATGGTCC TAACCCCGTC ATGGATACCA
 GGGGTGAATG GCAGGGTCT TCTCCTGCCC AGGAGGAAGG GTATGGGGAG CCGGTGCATC TTGACTGTCA GGTCACTGT
 CTTACCACCT TTACAGCTAG GCTTCTGAG GTGCCAGCGT CTCCTGGGAA TTCAAACGT AGTTTAGAGG CAAGCTGGGT
 GA

SEQ ID NO:833: (Length of Sequence = 398 Nucleotides)

AGCCTTTTTC CAGAGATCAG ACCTCTTTAG ACATCTGAGA NITCATAACAG GAGAAAAACC TTATGANTGC AGTGAATGTG
 GAAAAGGCTT CTCCAGAAC TCAGACCTCA GTATACATCA GAAACTCAT ACCGGAGAGA AACACTATGA ATGCAATGAA
 TGTGGGAAGG CTTTCACAAG AAAATCAGCA CTCAGGATGC ATCAGAGAAT CCACACGGA GAGAAACCTT ATGTATGCNC
 TGACTGTGGG AAGGCCTTCA TCCAGAAATC ACATTTCAAC ACACATCAGA GNTTTCATAC TGGAGAAAAG CCGTATGANT
 GCAGTACTG TGGGGAATC CTTTCACTAN GGNAGTCACA ANCTTCCATG TGCATCAAAG GNTTNACANC CGGGGAGG

SEQ ID NO:834: (Length of Sequence = 394 Nucleotides)

CTTTTTGTG AGTCTGTAAA ATCATTTCOA GTTAAATCT AGAGCTTAAT CCATATGING TGCCATCTTT TGCTTTTCCA
 CACCTCTNAT CCTAGGTAAG TNAGAGCTAA XGAGTATTN CTGAGCTTCT ATTATGGGCC CAGCATATGT NATAATTCCT
 TTTACACATA GGAATCTGAG GCTTAGAGAA GTTACTGAT TTACCTAATG GCACACCATA AGTNCCTGGG CTAAGATTTA
 AACTCAGGTC TCCTGACTTA ATTCAAGATG TCAGCTCGAT GGTAATCATA ATAATATGT NGTGTGTGT GTTGTGTGTA
 TMTATCAACA ATAGTAGTAG CTAAGTCCAT TTCATGAAAC AGCTCATTGG ATAGTCCCAT NTGGATAATT CTGA

SEQ ID NO:835: (Length of Sequence = 422 Nucleotides)

GCTTCTGCC TCTATAGATT TGAATTTCT GGACCTTTCA CATAAACGGA ATCATGTAAT ATATATAATA AGCAAAAGGT
 AACAAACACC AAGCTGGCAA TTTGGTTGAT GAATGANTAA ACAAAATGTG CTGTATCCAT ACAGTGGAAA TATTGGTGCC
 TACTACATGT GGATGGACCT TGGAAACATC ATGCTGAGTG AGAGAGAGCC TTGGTATGT TTCTCTCCC CAGGAGATTC
 CAAGGTGCAG CCAAGGTGA GACCCACTGA CAAGCAATGG ATATGGTTGG GTGCAGATGA AATAAGGCAG CCAGGGGCAG
 GAGGGATGTC TCATTGAAGA TGAATTTT GTGGGATGCC TAGCAGGGGT GGGGGGATGA GGTATTGATA ACCAGCAACC
 CCAATCTTCA ACACAGCGTG GA

SEQ ID NO:836: (Length of Sequence = 408 Nucleotides)

CTCAAAGAG TTGGCATCTC AGAAGGGAAG TGTAAGTAC ACAATTGTCA TTGATGATGA AGAGGACATG GAAACAAATC
 AAGGGCAAGA GAAAAATCC TCCAATTTTA TTGAACGAAG ACCTCCTGAG ACTAAAAACA GAACCAATGA TGTGGATTTT
 TCCACTTCCA GTTTTTCAG AAGTAAGGTA AATGCAGGAA TGGGTAATAG TGGTATCACC ACAGAACCAG ACTCTGAAAT
 TCAGATTGCT AATGTTACAA CTTTAGAAC AGGTGTAAGC TCTGTGAATG ATGGCCAATT AGAAAATACT GACGGGCGAG
 ATATGAACCTT AATGATTACA CATGTAAACA TCACTGCAGA NTACCCACTT GGGAGGATTG TCTCTAACCG GGACTGCAGT
 CCAAGTAA

SEQ ID NO:837: (Length of Sequence = 347 Nucleotides)

TCGCTCTGTT GCCCAGGCTG GAGTGCAGTG GCACGATCTC AGCTCACTGC AACCTCTGCC TCCTGGGTTT TAGCGATTTC
 CCTGCCTCAN TCTCTCAAGT AGCTGGGATT ACAGGCATGC ACCACCACTC CTGGCTAATT TTTGTATTTT NAGTAGAGGC
 GGGGTTTTC CATCTTGCTT AAGCTGGTCT CGAACTCCTG GCATCAAGTG ATCCATCCAC CTTGGTCTTC CAAAGTCTG

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CTAACTAAAA CTAGTCCAAG CACTGAGACA GAGTATTAAA AGATGGTAGC ACACCCAAAG NGCAGGGTGG GTCTTGAATA
GCTAACATGT TTCAAGTAGT GGAGGNAGAT GTGCTTAAAT AGTTACC

SEQ ID NO:827: (Length of Sequence = 426 Nucleotides)

TTTTTTTGT TTGGGACAG AGTCTCACTC TGTCACCCAC GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA CTGCAAGCNC
TGCTCCCGG GTTCATGCCA CTCTCTGCC TCAGCCTCCA GAGTAGCTGG GACTACAGGG GCCCGCCACC ACGCCCGGCT
AATTTTITG TATTTTITAGT AGCGACAGGG TTTCACCGTG TCAGCCAGGA TGGTCTCGAT CTCTGACCT CATGATCCAC
CTGCCTCGGC CTCCCAAAGT GTTGGACTAC AGGCATGAGC CACCGCGCCC GGCGGATGG TTAACAATT TTAATAATA
ATATTTAGTG CTAAGACAGG ATATGGAGCA ACAGGAATC CTATATGCTT GCTGGTGGGG AATGCAAAAT GGGTACAACC
ACTTTTGGGA CAAACAGTT TAGTAA

SEQ ID NO:828: (Length of Sequence = 402 Nucleotides)

GGCTGCTGC TCCACTCAA CAGGTATCTG GGAGCCAGCA CTCTGGCAGT CCTTCTAAGC TCTAACTCTG GTTTTACTGT
TTTNNAGGTG AAACCTTTGT CCTGGGAAT AGTCTGGCCC GCTCCTTGGG ACCACTCA GACTCAATGG ACTCTGCCCTC
AAATCCACC AACCTTGTCA GCACCTCCCA AAGGCACCGG CCTTGTCTT CATCTGTGG CCTCCACCA AGCACTGCCT
CAGCTGTGG CAGGCTATGC TCCAGGGGTA AGCTTACCAG AGTCTGGCC CTNCTCCCT CCTCACTCT TTCTTCACT
TCCTTCTGA GCTCTGGGAG GCCAGAGAG ACCTAGCTCT GTTCCCTCT GNCINGTGGT GGGGACTAGG GACTGGACTT
AA

SEQ ID NO:829: (Length of Sequence = 417 Nucleotides)

ATCGGTIAGG AGTCGGCTTT ATGTGGGAAG AGAGAAAAA ACTTGGTGAA ATGCTTCTG GACTAATGA AGAAAAATGT
AAACTACTTG AAAAATTTAG CCTATTCCA AAAGAGTAGT AAGGCTATGA AGTACAGTCA TCTTTAGAGG ATGCCAGCTT
TGAGAAGGCG GCANAGAAGC ACGAAGTTTG GAGGCAACCT GTGAAAAGCT GAACAGGTCC AATTCTGAAC TTGACGATGA
AATCCTCTGT CTAGAAATAG AGTTAAANGA AGAGAAATCT AACACTCTC AACAGATGA ACTGATGGCA GATATTTCAA
AAAGGATACA ATCTCTAGAA GATGAGTCCA AANTNCCCTC AAATCCACAA ATAAGCTTGA AGNCCAAAT CATCTNGCA
AGGTTCTTC CCAATGG

SEQ ID NO:830: (Length of Sequence = 404 Nucleotides)

GGTTTGAGAG TAGAACAGGA AGTTGTGAGT AGAGCCTTGA AGGAAAGAGA ACAGCAGGTG CATGGNTCCC CAGGCAGGAC
TCAAGGTAGC CACTCAGGCA TCAGAAAGAG TCAGGCGGCC ATGATGGCTC ACACCTGTAA TCCCAGCACT TTGGGAGTCT
GAGTCGGGTG GNTACCTGA GGTCAAGAGT TCGAGACCAG CTTGACCAAC AGGGTGAAAT CCTTCTCTA CTAACTACA
AAAATTAGCC AGGTGTGGTG GCACATGCCT GGGACAAAT TGGGATCAGT GTTCTCCAGT CTGAACATAG TCTTCTGTTA
CCTGGGAGAG AGTGGTCAGG TACTTCCAGC TTCAGGGCAG CCAAAGCAT TGACAAAACG ACAGGTAGGA TGGGGGAGT
AAGT

SEQ ID NO:831: (Length of Sequence = 330 Nucleotides)

AATTTACAG GTTGTGCTT CTGAAATCTG TACCTTCTTA CTATAACAT TTAATGTAGC ATTCTCAAC CTGACCAATC
TGCAGAAAT ATATGTCATA TATTAAITGT GTATACATGA ATATATGCAT TTTCCITGGTA AAAAGTCATA GTTTTNCATA
GATGTCATGT AATCTTTTAA GAGATTCTCA AATAGGAACA TGATTCCACC CCAATAATGG TGAAAAATGA TCAATTTAGA
TGAAAGGGAC CTCAACAAGC CTCTTGAGAT ATGAANCATA AAGAGNAAT ATAAGCCGCA ACTTTTGTAC ATGACAGATT
CATAATGGTT

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CCAGTTAATT TTGTAAAGTT TATAGNGATG GTTTCAGITA GACCTGTGCT GTCAATACAC TAGCAATTCA CATGCACATT
TAANTTTAAA TCTAAGTTTA AATTTAAATT AAGTTAATAT TAAATAAGAT TTGAAATGCA ATTCTCAGTC CTACAAGCCA
TGCTTCAAGT GCTTCATATC CATGTGAGGT TAGTGGCTGC TATACTGGNT AGTGCAAAAA GAGAACAATTA TTGTAATCAT
AGAAATTCTA TTGGTAAGTT TATGGGGTAG TACATGGACT AGAATGTAGT GAGGTAGTGA GCTGTGGATG CAGAGAAAGG
NCACTGGA

SEQ ID NO:821: (Length of Sequence = 310 Nucleotides)

TCAGCATTGT TTTCTGATG INTGAGATG ATTATTTGGT TTTCTTTTTT ATTGTGTTAA TTTGGTGAAT TGCATCANCT
TTAGTATCTT AAACCAACCT TGCCCTCTTA GGGTAAACCT TATGTGGTCA TAATATATAA NCCTTTAAAT ACATTATTGG
ATINCTTTTT TTAATATATT GCTGAGGATT TTTTCATGACT ATAATCATAA GAGATATTGG CATATGATTT CCTATACTTG
TAATGNCITTT GTTAGAAGGA GTTTATATTA GGNITTAATNC TGGCCTCATA AAATGGGTTG AGAAATGTCC

SEQ ID NO:822: (Length of Sequence = 372 Nucleotides)

GCCAGATTGT NTTCCTTGCG AGCCCTGAC CCCGGCTACT CTTCACCAGA CACGGCCCCG CTTGGCCCCA CAACACAGCC
GTCCACCCCC TGGTTCCTTC ACCTTAGCAG TAGCAGTAGC TCTGGGTGGA GTTGCCAGAG GAGCTGACAG GCCCTCTGCC
ACTGCTGCCA CCCCAGGGC TAGGGAGGGA ACAAGAGGCC TGCTTGCTGT GCTTGCACAT CCAGCATGCC ACAGCTGCAC
TAGGGNGAGG AGGTCAGACA GTCCCCCAA CAAGNCCCG ATCCTCTINC TCTCCACCAG GGAGGGCCCT GGGCTTTGCG
CCCACAGNAC AAAACGTTC ANCCCGGCT GATCATTCTG GGTGGCAGC GG

SEQ ID NO:823: (Length of Sequence = 288 Nucleotides)

AGCTGGCATC CCTGGGGAAA ACCAACGAAC AGTCTCTCA CAGCCAAAT CACCACAGTA CTCCAATCCG NAACCAAGTG
CCCGCATTAC AGCCCATCAT GAGCCCTGGG CTNCTTTCTC CCCAGCTTAG TCCACAATTT GTAAGGCAAC AAATAGCCAT
GGCCCATCTG ATAAACCAAC AGATTGCCGT TAGCCGGCTC CTGGCTCACC AGNATCTCA AGNCATCAAC CAGCAGTTCC
TGAACCATCC ACCCATCCCC AGNGCAGTTA AGCCAGNGCC AACCAACT

SEQ ID NO:824: (Length of Sequence = 325 Nucleotides)

CTCCTGAGGT CAAAGCTGCA CGTGGGGAAG AGAAGACAA GGAGACCAAG AATGCTGCCA ATGCTCTINC ATCCAAGTGG
GCCAAGACCG CCACTGCAGG ACCAGGAACCT ACCAAGACGN CCAAGTCATC TGCTGTGCC CCAGGCCTCC CTGTGTATTT
GGACCTGTGC TACATTCCTA ACCACAGCAA TAGTAAGANT GTTGATGTGG AATTTTCAA GAGAGTGCGG TCTTCTACT
ACGTGGTGAG TGGGAATNAC CCGCTGCTG AGGAGCCCAN CCGGCTGTC CTGGGACGCT TTNTTTGGAA AGGAAAAGGC
TCAGT

SEQ ID NO:825: (Length of Sequence = 318 Nucleotides)

AATCAGCCCT ACAGCGATT CTCCACCCCT ATTAGCAAAT ACCGTAAATAT ATGNTCTAG TAATCATCCT CTCACAATTC
TNCITTTCTT AATTNNCCG TGAGTCAAGT TTCTTGACCA CAATGTTATG CTGAGGAAGA TCTAATGTTT TCCATGGAGC
AGAAATTGTT AGTCTCAAC TCCAAGGTCT GCCTGTCAA GCCCTGTTN CCGTGTCTC ATAAACCTTG TCAGGCATTT
ATTTATTCAG CACATATCTA CTGINTCTG CACAAGAATT CATAAGGTTT TGATGAATTA TGTCCCTTCT GAGTGGGA

SEQ ID NO:826: (Length of Sequence = 287 Nucleotides)

TACAGACTCA GGTATAGGG TGINATTTT TAAGTCAATA TTCAGTTTCA CAGCCAGAAT CTGTGAAGAG AGAACAAACC
ATGAGAAAAC TAACANITTT ATGGTGATTG AGAGGTTCCA AGTNCCTGNN GTTTTAAAAA AATCAGTTTT TAAAGATAAA

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SEQ ID NO:813: (Length of Sequence = 310 Nucleotides)

AGGTGGCCTC AGNNCAGCCA AGCTGACCTT GGCACCTGGC TGGCTTCTNT AAGGCANTAG AGTGCCACCA CATAAGCNCA
 CCACCTNTCC CCACCTCTTC CCTTCTCTCC CATGCCACCC CACTTGCTTC CAAGGGCTTG GTTTCCAAAG TNACATCCAG
 GGTGTAAGAG GTTGGGGAAA ACGTCTGCA AGNIGGCTCA GGGATCTNAT TCCATCAGAT GGTCTCATGA ATACTGTGGG
 AGATTAAATC CATCTCAAAA TAGGCAACCA ATGCTATATT CTGAATNINA GGTCTCTGGA CTGAGTCCCA

SEQ ID NO:814: (Length of Sequence = 361 Nucleotides)

GATTGAGCC ATCAGAATTC AGCTTTTGTA GATAAAGAAT ATGAATAAT TGACTATGGA TGAATTAAT GTATATAGTC
 AGCTTGCTGA ATTATGGTT AAGCACTACT AACTATATCT TGGTAACTA TGGTGCAACT GAGCCACCCC CTAAAAGCAA
 AAGACATTTA GCAGTTCACC ATATTTTGCA ATTAACCAA TGAGAGCTTA TGAGANTGAA ATGNTTTCAG GTGGAGTTTG
 ACAATACAAT TCATCCNTAA TATATAGGEN NAAATATTTC CTCAAAAATA ACATCTATGT GGTAGGNCCT TAAAAACGAT
 GGATGNAATG CATGCAAAAT TCTCTGGTAC ACAGACACAT G

SEQ ID NO:815: (Length of Sequence = 301 Nucleotides)

GAATTINACT CTGTTTCC AGGCTGGAGT GCAATGGCAC GATCTTGGCT TACGCAACC TCCGCTGCT GGGTTCCAGC
 GATTCTCTG CCCCAGCTC CTGAGTAGCT GGGACTACAG GCATGCGCCA CCACGGCCAG CCAATTTTTC CATTTTNAGT
 ACAGACGGGG TTTCACCATG TTGGTCAGGC TGGCTCGAA CTCGCGACCT CAGAGGATCC GCCCACCTTG GCCINCCAAA
 GTGCTGGGAC TACAGGTGTC AGCCACCACA ACCGNCCTAA TTAATACTTC TTGAAATTTC A

SEQ ID NO:816: (Length of Sequence = 310 Nucleotides)

ATCTTTAACA TATTAAATA GACATGAGAA AAATGTGTCA TTGATAAAA TGGGGGAAAT GTAATAAATG ATTACCAGAA
 ATATAAAATT AAGCGTATA TGCNCTTAAG TAAATOGAAT CTAGGCATCC TTAAAATGTA AAAAAGGNTG CAACAAGAGT
 AAGGNGCCCA GAATGATGTA AATTACAGGA ATGGGTGTGA ATGTAACCTC TAGAGGAGGT GATGTTTAGA AGAAGCAAAG
 NGAATGCAAT GANGAAGCAA ACTTGTTTTA GGCAATNCT CTTGGGAGTG GGACCAGGCA GCCCCCTCTT

SEQ ID NO:817: (Length of Sequence = 225 Nucleotides)

TGGCATGCGC CTGTAGTCCC AGCTACTCAG GAGGCTGNGG CAGGAGAAIN CCTTGAACCC AGGAGGCAGA GGTTCAGTGT
 AGTCGAGATT GCACCACTGT ACTGGTCTCA GCCTAGGCAA CAGAGCGAGA TTCCATCTCA AAAAAAAAAA AAAGTTAAAA
 NTAATATGCT AACTATGATA CAACTGATA GCAATATTGT CTTTAGATT AAAATAAAAA TAGGG

SEQ ID NO:818: (Length of Sequence = 225 Nucleotides)

TTAAAAAAC CTGTAGTTTC ATTACCTTTT TGAATAATGN CATACAAAA ATGTATTGN TTTTGTGTC TGTGAGAATT
 GATGTTTGTA GATTAATAAT CATTTGTTT AGAATTACAA AATAGTTTTT AAATATTGTC TGAGAAAAGC CAAAGTTAAT
 GCAACCNAGT GGAAACTGTA AGACNNTTG AGTATTGTTT GTTTTATTGG ATGCATTGG ATTTT

SEQ ID NO:819: (Length of Sequence = 280 Nucleotides)

TTGACTAGCT TCCTACGTCA TTAATAATTC TTAAATAGT CTGCTTAAAT GGCTGCAAT TTGTGTGTA GTCTGGGCTA
 AAATCTGATG AAATGTTTTA CTTGTGGTTA AGTAATTTAG CAACCTGTAT CTTTTTAAAA TATTACAACCT GGGNATTCTA
 GTACGTACA AACATTTGTA ATATCATTTA TTTTGTGCCA TTGTCTGTGC TATGAAATAC AGTAGAATGA AAATTTACTT
 CAAAGCATTC ATNTCTTCC CCCAGGNAT GATGGCAAAA

SEQ ID NO:820: (Length of Sequence = 328 Nucleotides)

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GGCAGATATA ACCTTTCTC AAACATCTCT AATTGTCTGC ATACCCCACT AATATTGGCT ACATAATACA TTTATTTTGT
 TCATTTGGGA CTAAGTGCCT TACTTAGTIT TGINCAGTGT ATTCATTAAT TGAAGAAATA CTTATTCCAGG ATTTCTATTA
 CTTAGTTTGT CTCAATATAT TCACTAATTG AAGAAATATT TATNCAGGAC TTCCATTATA TGAGCACTGG CCTTTGTGGT
 ACAAAGATAC AACATGAATC TGAAACTCAA TTTAATCTAG AAAGATTTAT TAATATAANC TCATCAGAAA AGCAAGNCAT
 CTACTGTGAT AGCTACAGTA TTGGTTAGAA ATGGAAAGAG AGAGCAGAT

SEQ ID NO:808: (Length of Sequence = 361 Nucleotides)

CAGGCTTTGT ACCAGCCGCC ATACTCTCCA AAAGATGTCC CATCCTTTIN CTTTCCTTTG CATCTTCTC TTTCTTCAGC
 ATGCATCCAG ATGGGTTTAT TTTTCATCCTC TACAGAACCA AACTCCCTTT CATGTGCACG AGTGAGAATC TCTTTGTACA
 GTGTTTCTGC TTGCTTGAAC TTTCTTGTIT TCAAATAGCA GGATGCCAGG TTATTTTNCG TCTTAGCCAC GTTGGGGTCA
 TCAGGTCCCA GTTTTGTCTG GTAGATCTCG AGGGCTCTTT GATAATAATA TTCTACTTCT TCATACTTGC CCTGGGTCT
 GGCACAGTAA AGGCCAAGTT ATTTAACTGC TTGGCAACAT C

SEQ ID NO:809: (Length of Sequence = 353 Nucleotides)

CIAATTTATC TTCATGTCCA GTGAGCAGTG TTGCGTTTTT CCTGTGTAGCA TTTGGAAATG ATTTACTGGA ATTACAAAAC
 CTATTTTCCC TTAAATTTT AGCTTTGGCT CTGGCTGCTT TTTAGAATAA TGCAAGATAA AAATCACACC TGAGGGCTGA
 AAACGGAGAG GGAATGGGAG ACTTGATATT TAAGCAGCTT GAATGGTTTT CONTINCTTT ATTTTTAAAG AAATGCACCT
 GCCTATGATA CTGTCTCTCC AGTGAAATGA TTACTCTCTC ATTACTCTAT TGATACANTA TTGTGCATGC TAGTGTGTGA
 TTTCTATACA GTAGCTTGAA AATTGATTAA CCT

SEQ ID NO:810: (Length of Sequence = 296 Nucleotides)

GAGGTCAATG CTTCCAGGC TCGAGTTGAT GCCACAGGT GTATTGTACG AGCATTGAAA GATCCAAATG CATTCTTTT
 TGACCACCTT CTTACTTTAA AACCAGTCAA GTTTTGGAA GCGAGCCTA TTCATGATCT TTTAACCATT TTTGTGAGTN
 CTAAATGGC ATCATATGTC AAGTTTTATC AGAATAATAA AGACTTCATT GATTCACTTG GCCTGTTACA TGAACAGAAT
 ATGNCAAAA TGAGACTACT TACTTTNATG GGAATGGCA GTAGAAAATA AGGAAA

SEQ ID NO:811: (Length of Sequence = 493 Nucleotides)

CCAGGAGCTT CTCTCTCTT GCCAGGGCTA TGAGCAGAAA CCTCAAATAA ACCCTGGGCA GAGAAAACCA ACTTAATGAA
 GAGGACGTTG CTGTTCCAC TGGCTTCTAA TTTTGAGAT GCAATGAGCA CTTACGGCTT TTGCAGTGGT TCAGGAAAAG
 GCAAGAAGAA GCAGATTGTC ATGTTCCAAA GCCCTCTGAT GGCTGCATGG AGCCAGCGGT GCTGTGACTT TTTTAAATAG
 CTTCACTACC TTTNATACGT ATGTCCTTAT TTACTCTTTA TCTATGCTCT CTTCTCTCCA TCAGCCTGGG AGCTCCCTGG
 GGCAGGTCTG TTTCTCCCT CCAGTCCGGA NTTCGAGGA GCTGTGCTC CCCCATCACA CTGGAGGCT GTCTNAAGGC
 AGGGGCTGTG GTCTCTGCCA TTAGACTINGA AGCTCCCAA GGTTAAAGT CATATCTCA AAAAAGCTTA GAATAGCTTA
 GGAACCTAGG GGT

SEQ ID NO:812: (Length of Sequence = 337 Nucleotides)

AAATTACAT ACTGTAGT NATGCAAGCA AATTCTCACA TAATTATTTT TAAATGCTAG ATAGTTGGTA TAATTNCAAT
 CATTTTAAAT ATGTTAAGAC TTGTTTGTGA CCCTAACATG AGGTCTATNC TGAAGAATGT NCCATGTGCA CTTGAGAAGA
 ATGACTGGAG TGINCTTTAT ATGTATGTA GGTCCAATTA GCTTATAGAA TTGNCCTAGT CCTCTATTTT CTTATTCANC
 TTTTGTGG TTGTGTNCT ATCCATTATT AAAAGTGGG TATTGAAGTC TCCTACTATT ATTGTGCTAT CATCTCAGC
 AACTAACAC AGGANCA

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SEQ ID NO:801: (Length of Sequence = 408 Nucleotides)

CIGCGTTCCA TGTAGCGTCT TCCACAGINC TCIGTTATAA GATGGTTTGT TACATTGCTG CAGATATTTT TCATGTCTC
 TTGAGTTTCT CAAGACCAGG GTTGTATTTT TCCATGTCTG TCGATGAAAC AGTACATGAC AAAAGAAGGT ACTTAATACA
 TGTITGATAA ATTAATTACT GTTTGGTAAA TTAATTATTG AAGGAAGACC CAGACTGGTT CTGATAAATC ATTGATTACA
 TTTTACAAAT TTGGATAAAT TAGGGGAGCC TTGAGAAGTT AGAGCTCTAG GGAAGGTTCC AGGGAACGTT TGAAGGATGT
 GAAATATGGT TTTCAAAATT CATAGTTTAT TGCAGGATTC TGGNATACTT TCCCAAGTGA GGGGNAAGAT GAGGAAGANG
 ATGGGCTT

SEQ ID NO:802: (Length of Sequence = 343 Nucleotides)

ATGAGACTTA CTCACTATCA TAAGAATAGC TTGGGAAAGA CCCACCCCA TGATTCACT GGGTCCCACC CACAACACAT
 CAGAATTATG GGAGCTACAA TTTAAGATGA GATTTGGCTG TGGACACAGC CAGACCATAT TAGACTCATA ATTGNCCTTC
 TGCACAGTAA GANCTGGGCT GGGATACCTC ATAGATCATA AACAAATCCG CACCCATGAA AAGATTTAGA GAGTCACACA
 GGAAAGTCAA CAGAAGNCAG AGAGATGTGG GTCTGNGCT TGCATGTCAT TAAGTGGTGG GNTCCTTCAG CTTTCACATN
 TTCAGGCAGT GGGGTCAAGA AAC

SEQ ID NO:803: (Length of Sequence = 182 Nucleotides)

GAATGGCCTT NTCTAAGGC ATGTATGACT TGCATGANCT CTCTAAAGCT GAACTGGCCT CACCTCANCC TGCTTGCTG
 GCAAATGCGG CCTTCAGTGG GAAAGTAAAT GGCAGCTGCT GTNATTACCT GGTCGNTGAA GAAAGACAGA TGGCAAATTT
 NATGCCTGTT GGGGATGACA GC

SEQ ID NO:804: (Length of Sequence = 312 Nucleotides)

TTTATTTACT GCGTTGTAA ATNATCACAA AACATATTCA TTGTCAAGTG AATGCACAGG CTTTCAAAGG TGATTGTATT
 CTGCAAGGTG GGGAAATAGC AACTACCTTC TAAGGTGAAT GTNCAGCCTG CCATTTCCAA CCCCAAAAT CCTCTAGATT
 CTCACAGGG CAGCTTCTGC TTCTATGCTC TTTTGGGAAA GGTGAGCCT GTGTAGAAGG CTTAATACCA ACATGCAGAT
 CCACCTGAGA ATCACTGGAA TGCTCTGGAC CCAGCTGGAA TGCTTCCGGA ACCCAGTCAG GCTTNOGGAA AT

SEQ ID NO:805: (Length of Sequence = 411 Nucleotides)

CATGCAAAAT TCAGAAATATA AAAAANTGCA GGGCCTGGTT GCCACATAC ATTCTCTAGG TTAAGGTGGA TTAAAGATG
 CCAACAGAA CCAATGAAT CAGAAGCTAA AAGGGACACT TCAGTGATCA GCAGACGCAT TCTCTACGT AACAAATGGA
 GGGAAAGTGA GCACACATTA ACTAGCGAAG TCACAAGGCT AGATTAGGGG TGTACAGAAA TCTAATTCCT GGTCCTATTT
 GCAACTACAT ATATTTAAAA TACANGGAGA TAAATACCCA GAACACATTA AGCCTACTGA TTTAAACAGA NCATTTCAAG
 ACTGCTACAC AGAAAGGGAA GGAAGCTGT TAACCCAGCA CAGCAGCACA CCTCACATAT TTCCTCTCA GAGGTAAAT
 GGAAGGAAG G

SEQ ID NO:806: (Length of Sequence = 287 Nucleotides)

GCATTINAGT GCTGATACAG ATACAGTGAG TTCTGCGCT TTCTCTCTCT NTATATGAA GGGATTATAA ATGAAGCTCT
 TTAAACATTC TGAGATCINT AAGTTGATTT CTACATGAAC TCCAAGTGGT GTTAATGACA TTTTCAGAAA AGATGCTTTA
 CTTAGCTGAC AAGAAAAAGT ACTCTGTAAAG CCTTTATTTG TATGTGATAA AACAGAGTTG ATAAAAATAT CTACTATTAA
 CTTATCAATG CAGTCTTACA GAATCCACCT ANTTACAAAG TAGATAA

SEQ ID NO:807: (Length of Sequence = 369 Nucleotides)

SEQ ID NO:795: (Length of Sequence = 332 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATATC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGANGT GGTATCCAGA
 TAGGTTATCC TTGGAGAGTA TCCAGGGATG TCTCTTNC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTNAGAATT CACGTAAGGN ATGATAATCT GAATTTCCAG GGCTAGGCTC
 AGAAGCAGAA AT

SEQ ID NO:796: (Length of Sequence = 305 Nucleotides)

CCCAAGGGGA CAGCCTGANC TCCCTGCTCA TAGTAGTGGC CAAATAATTT GTTGGACTGT GCCAACGCTA CTCCTGGGTT
 TAATACCCAT CTCTAGGCTT AAAGATGAGA GAACCTGGGA CIGTTGAGCA TGTTTAATAC TTTCCTTGAT TTTTNCCTTC
 CTGTTTATGT GGGAAAGTTGA TTTAAATGAC TGATAATGTG TATGAAAGCA CTGTAAAACA TAAGAGAAAA ACCAATTAGT
 GTATTGGCAA TCATGCAGTT AACATTTGAA AGTGCACTGT AAATTGTGAA GCATTATGTA AATCA

SEQ ID NO:797: (Length of Sequence = 337 Nucleotides)

GGCTGCATTA TGACAAGAAG TCAAGCTTCA TGACAGTTAG TATGGGCTGG AGTCTGCAAA GTCTGAACCTG TATCTCATA
 GAATGATTC AGGTTTCAGG GTGTCCACC TGCCAGAACC CAAACTACA ACTATGGGCG ACACAAGGGA AGTTTITAGAA
 ATCTCCCTCT ACACGCATTT CIGGTTTCT ATTATCTCT CATGGCAGCT GACAGATCTG GAAGTGNAAA TAGGGGATTC
 TCAAAATCAA AGCCANGAAG ACACCTTGTC TGACACCAAT GGAGTCTCAG AGGGTGGGAA TAGAAGTGAC TINGNCCCAG
 GCATTTGCTG GGAACCT

SEQ ID NO:798: (Length of Sequence = 341 Nucleotides)

GAACCTGGA AGGCTAGGC TACAGTGAGC CATGTTTGCA CCACTGCACC CCAGCCTGGG TGACAGAGTG AGACACTGTC
 TCCAAAAATA ATAGTATATA TAATAATAGT CATTATTTTT AAGTCTACAT GCTGAGATGC CAGAACAAGT AAAATTGGAT
 TATAGATTCA AGCAGTATGT AGGTATACCT TCATAAAGTC AATACTGATG TAATTTTGA TGATTAAAA CAGNCTTTTA
 GTAGGTGTC AAAAATCTGG NTAATTCCT TCATGNCATT CAAACATTTA GGTGGCCTGT CTTGTTTTTT TTAGNTATA
 ACTTGCAAC ATTCANTTGT T

SEQ ID NO:799: (Length of Sequence = 322 Nucleotides)

TTTTTGAGTA ATGAATTCAT TTAATATAAA CTTTAGTATA GCAGAATACT ACAGGTTACC CACATTTAAC CCTAAAAACA
 AACAAATGAC AGGCACTTCA GTGAAATAAC AAGCCCATGT TCAAATATAA AATGCTAAAA GTGAGAAAGA AATTATGAAA
 ATATATACCT TTAATTTGCA GACATATAAA CACTTTTGGT ACAGTACAGA TGCATGATGC CAAAAGTAA AATGNTCCAG
 TTTAAGCTAA CACATTCCTT GTTTATACAG NTAATTTTNC TATAGCTCTC ATATAANANA AATATTNCCA GCTCACACAA
 TG

SEQ ID NO:800: (Length of Sequence = 405 Nucleotides)

ATCAAGAGTT GTTGGTCTA CCGACTGAGC CTGCCAGATA ACCCTGTAGT ACAATTTTIN CAGCATAGTG GAAAAGAAAG
 CCATGGNCT GGGCAGGTCA GGGTTGANC GCTAGTGNCT TGTATTAATG ATCATGATGA TAGCTAGTAG ACAGGGCTTA
 CCAGATACTA GTGCTCTCT TAACTGCTTT ACATATGTA GTTAACCTAT TTAATCTTCA TGACATCACC CCTGAGATAT
 GGGTAATATT ATAATGCACA TTTTATAGGT GATGAGAGTG AAGCACTTGC ACAGATTACT CCAGCTTAGT TCATAGCAGA
 GCTGGGACTT TTAATCAAG GCACTAGATG GTTCCAGAGC TTGTACTAC TCTTCCTGGG TCTTTCACAG TCTGAGCTGG
 TCCGG

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CTGINATATT TGTAAATGGTT TACTATGAAG GCTGTTCAT AACCTNCAAT ATCCACTGNT CTGGGTGGT ATACCAAGGA
TA

SEQ ID NO:789: (Length of Sequence = 357 Nucleotides)

TCAATGTGGC ATTGTGTTTT NTAGAAAAC CCTTAGTAA GCATTCTCT AACCCAGAAT AGACACTGGG TATCCTCCAA
GAGTCCATA GCTTTCATTT CATCTTCAC CCTCTCTGA GAGGGGAGG CAGGGGATAG GGGTGGTTC AGGCAGTCTC
CAAAATGCC CTCTAGACC CTGAGAGAA TTCATGTGC CAGCAATAA CCAACAGCAC CTCAGTGGG CATCANAGGG
CCTCTAGGC TCAAGGCTAT TGCCAAAGG CATCTCTGT TTATGAGCTT CACGATGGGA ACCAAGGAG GCTCTGCAA
GACTTCCTAG GGGCTGGTC CTCAACTTA TGGGCT

SEQ ID NO:790: (Length of Sequence = 366 Nucleotides)

TGGCCAGGCT GGTCTGAAC TCCTGACCTC ATGATACACC GGCCTGGCC TCCCAAAGTG CTGGGAATAC AGGCGTGAGC
ACTGCACCA GCTTGTGTG ATCTTTTAA GTACAGTTC CATAGATTTA CATTAGAAT AAAAAAGTCA TGACATCTTG
CTTTTATAG GCAGTTTACT CAAGCTTTT AAAGAAAGAG CATTCTCTT GCTTTTACGT GGTTTTAGAA TGTGAAAAC
CTTTGNTAA ATCAGAGTAA TTTACTGCAT TTCCATTAA TTCAGCTTAG TTAGACTGCT GGTCCAGTG CTTGTGTTG
CTGTACATA TACCCIAATA TGCTTTTAA CATATGCCA AATTCC

SEQ ID NO:791: (Length of Sequence = 317 Nucleotides)

AACAACCCA ACCATAATG AGAAGGAAAT GGCCAGAGTG GCCACTCTGC AGCGGGCCCT GGTTTTACGA GCAGAACTGA
GCCTAGCAA TCCTCTGGAA GTCTGCGTA TAGTTACAA GATAGTTTG GGTGAGCGT GCCACGAAAT GTGAGTGCT
TTCTCAGTA TCCTACAGG CAAGAAAGG GAGATTTAC TGGCATGGG GAACGAAAG GTAGAAATGT AAAATTCCA
AGCCTCTGC AGGAAGTGCT TCAGGNTAC CACCACCACC CINACAAGN GATATTCTAG GGGGTACTCA AGASCAT

SEQ ID NO:792: (Length of Sequence = 258 Nucleotides)

GATCAATATA TCCAGGAATT TGIGAAAAGA TCCTAAACTT TTCAACATG TCACAGGTAG TACTTGAAGT ATGCTTGTA
AAATGTACCG GTTAAAGCAG TATGTTCTC AGATAGCCTG AGATTTTATT TAACAATTAT GTATCTAAGT CTAATAATAC
ATTTGAGCAA AAGAGTGTG GGTNCATAA TAAGANGTCA GTATTTCACT TAGATTATT CAGAACTTG TAAGTNCCTG
TAAATAGCTA CTCIGAAA

SEQ ID NO:793: (Length of Sequence = 282 Nucleotides)

GGAATGACAT GGTCAATCTN ACTTAAAGA AACATTTTAG GTTCACACTT GCCAAGTTAG GAAGAAAACC AACCTTAGAT
CCTTCCCCC CCACCAATAC TCCTTCCCC AAACACCGTC CCCACCGNC TCTATGTTA ATTGAATTTT TATTGTGAT
ATATAGAAA CCTAACCCAT GGCTGINATG CTGAGTGTCA TTTGGCTTCA AGCTCGAACC AGGGNACAGC TTGGCCTGGA
ACCCTGAGAC AAGATGCTG CCTCANAAGG TGGGGCTCA CG

SEQ ID NO:794: (Length of Sequence = 330 Nucleotides)

GTTGAGGCTG CAGGGAGCCA TGTTACCCC ACTGCACTAC AGCCAGGGTG ACAACAAGAA CCTTTCTCGG CGTGAACCCA
GGGGGGGAG TTGCACTGAG CCAAGATCGT GCCACTGCAC TCCACCAGCC TGGGTGACAG AGCAAGACTC CGTCTCAAAA
AAAAGTTTAC TACTCGGCTT TAATTAATTC GTTTCGGTTT TGGGIGAAAT NATTTTATTA CTGACTGGTT CCTAGTTGT
ACAGAAGCCT ATTATCTTTA GAGAGACTCT TCATGGTAAT TAACTCAGAT TCTTATTTTG CCTGGGTGAA AGGANGGCAA
GTGGATCTAA

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TGTATTGACA TTCTATTTTC TTTCTCCTCC AGATACTATT TTTNGGATTT NAAACATACA CAATACTTAG GAGACTTGTT
 TTACTCAGAG TGGAAAATTT TNCAGGGAC AAAGTCAACA CAANGAAACA AACAACAAA AATAGCCAGA AAGAGAACAG
 TTAAGTGCAG CTCGGTGAGT CCCGGCAGTT CCTTCCCGGC ACTGGCTCGT CCCTGGGGTT CTCAAGGTTT CATGCGGCCA
 CAGCGTCCGT CCACCTGTTC CACGNGAGCC ACATGCTGGA ATT

SEQ ID NO:783: (Length of Sequence = 350 Nucleotides)

CATTCAGGCC GGGCACAGTG ACTCATGCTT GTAATCCAG CATGNTTENA GACATAGCAG TAGGGACTAT CGACAAAGAA
 ACACACAGAG GGAAAAAGAA TTCCACATTT GGGAGGCTGA CGCATGAGGT TCACCTGAGG TCAGAAGTTC AAGACAAGCC
 TGGGTAACAT GGTAAAACCC CGTCTCCACT AAAAATACAA AANTTAGCTG GGCATGGTGG CCTGGGGCTG CAGTCTCGAC
 TACTTGGGAG GCTGAGGCAT GAGAACCTCT TGAACCCGGG AGGTGGAGGT TGCAGTGAGC AGAGGTCATG CTACTCTCAA
 GCTGGGGCA ACAGAGCGAG ACCCTGTCTC

SEQ ID NO:784: (Length of Sequence = 265 Nucleotides)

ATAACTGAAA AATGGAAGAA AATATTGCA AATTACACAT GTGAAAAGCA GTTAATATCA AAAATATATA AGANACTCAA
 AGGACTATAC AACAAAAAAC AAATAACCAT GAAAAATAAG CAAAAGATAT ATATAANINA TTTNCAAAGA AAGACATACA
 TATAGCTTGG CAGATAGATG AATATGGCTC AAAGTCAATT ATCATCANGG AAAGGCAAAC CAAAACAACT CTAAGATATA
 AACTCACTCC TGTAAANTG TTAA

SEQ ID NO:785: (Length of Sequence = 363 Nucleotides)

GTAAAGNTTG AGAAATCGGA TGGTGTCTGT GTCTGTGTAG AAAGAAGTAG ACATGGGAGA CTTTTCATTT TGINCTGTAC
 TAAGAAAAAT TCTTCTGCTT TGGGATCCTG TTGATCTATG ACCTTACCCC CAATCCTGTG CTCCTGAAA CATGTGCTGT
 GTCCACTCAG GGTAAATGG AAAAAAAGA AGAAAAATGA AACCAGGAGT TGGCAATTAC TTTTTTTTTT TTAAAGACA
 GAGTCTTGCT CTGTACCCA GGTGAAGTG CAGTGGTGAG ATCTTGGCTC ACTGCAACCT CCACCTCCCA AGCTCAAGTG
 AATTCTCCAT GCCTCAGNCT TTCAGAGTNA CTGGGGATTA NAA

SEQ ID NO:786: (Length of Sequence = 291 Nucleotides)

AACAACAATC AGCCACAATG TGCTTTTAAG GATTTAACTG ATAGTAAAGA TAAATGTGAG TMTAAGAAT GGGATTTTTA
 GACTAGGCTG ACACAAGGGA TCTTCTTINA ATAAGGNTCT TGACCATTTG TMTTTTGA GCTCATCCTT AAGGGCTGGA
 CAGGAAGAAT CCTGTGTAT GTGTGCATGT TGAGCAATGC AAAAAACACT CTGCCAAATC CTNGATACCA CATGGTCTNG
 AGAAATGCAT GAGTGATTIA ACGCACGNT GGGTGTAGTC ATTATGTTCC T

SEQ ID NO:787: (Length of Sequence = 256 Nucleotides)

TATTTCTGTA TAATTTTAT TATGACCATA AAAATAACAA TGTAGTCAAT AACAATTAA TTGTACATTT TAAATAATT
 AAAGTATATA ATTACACTGN TTGTAATAAA AAGTATAAAT GTTAGAGGTG ATGGATACCT TATTTACCTT AATGTAATTA
 CTACACATTG TAGGCCTGAA TGAAAATATG CCAATATAAGG CATAAATATA TACACATACT ATATACCCAC AAATACCAAT
 AATAAATTC AATAAG

SEQ ID NO:788: (Length of Sequence = 322 Nucleotides)

GGTCCAATGA AGCTTCAACT CGTTTTCAGC TCAAAGCAGA CGGCAAATCA GCAAAAAGCA AAAATAATGT ATCTTACTGC
 ATTACAGACA AAAAAAAGA AAAAAACAGA GTGAACTAG ANCTATTTTC AATAGTAGTT TCTGACAGC TATATAANCA
 AATATAGANG ACATTATGGA ATTAGTGATG TGAACGAGAA CTTGTCCATG TATCTGCTT GCCAGCAAAG GTAGAGATGG

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AACACTGGGT AAGCACTTTG TATGINCTGG GCACTCTGCT AGAGATAATG TGTCTGGAAT TGGTGGGTTT TGGTCTCAC
TGACTTCAAG AATGAAGCCG TGGACCTCG CAGTGAGTGT NACAGCTCTT AAGGTGGCGC GTCTGGAGTC TGTCCTTCT
NATGTTTCA TGTGTTTCA GTTTCTTNCCT TCTGGTGGGT TCGTGGGTCT CGCTGGCTCA GNGTGAAGC TGCAGACCTT
TNGGTTGAGT GNTACAGCTC TTAAGGCGNC GGTCTGGAG TGTCTGTCNC CTCCCGGTGG GCTCGTGGTC TCGTGGGCT
CAGGAGTGAA GCTGCAGATC TTOGC

SEQ ID NO:777: (Length of Sequence = 229 Nucleotides)

ATTGGGGGAA CCAAGCCCA NTAATGCTAT GGCTGTGCA GACTTGTAGA GGTACTGCCT TCATGGTCTT NGGTAAAGATC
TGGGAGAATT CCTGGATTA CCAGGCAGAA ACTCTNATTC TCTTGCCCTA CTCCCCCA AACAAATNAG TCTCTCTCTC
TCTCTGCTCT GAGCTGCCTA GAGCTGAGG AGGGGGTGAC ACAAGCACAG CTATGTCACC AGGAAGCCA

SEQ ID NO:778: (Length of Sequence = 361 Nucleotides)

CAGAACTCA GGAATAAGC CATTAACITT CAAAGAATAT GTGTGTGTGT TCGATATTTT CCATTCTTAA TCCACATCCA
CGTGGTCAA GTAGAGCTTC CTACTCAGAA GCACAGCAGT TGCCATGGTG TTCTCTTCCA TCTGAAAGCA GCAATTTTCC
GCAGGTCCA TTTACAGAAT GTCCATATTT TACTCAGATT CTAATGTATA TTAATATGTC TTTGGAACT TAACAAGAA
CGTGCAAGCN CTCAGTAAAG AAAAGTTGTA GAAAACAAA ACTGAACAGC AGGCTTCTAG TTTCTCTCT CCCAAATGG
CCTTAGTGGG ATTCAAAAAT GGAAGTGTG AATAAACTG C

SEQ ID NO:779: (Length of Sequence = 392 Nucleotides)

CCTAAGATGC CTGGCACAAT CAAAGACCTT TGGTGGCTTC CAGCATTTAT AAGGCAGAGT CCAAACACAC ACTTAAGAAT
GACTTACTCC TCTGGGGAC CCACCAATTC CCTACCCCG CTTGGCTCT GTCTCTCTGT GGAGCTGCC CTGCCCTTAA
ACACTGCTC CTCTCTACCA ACCCGGACCA TATTTCCCT CCTCCCTCA CCAGGTCCAG CAGTACCAC CAGTTTGTG
GACATCTCCC CAAGGAGCTC TCACTATCA GAAGCAAGGA GTTAGCCTTC AGCCCCACCT CTGTGCTTA GGTCTACAGT
GAGTCTCCAG TGATGCTCC TACCGACTGC TTGGGGGTGC ACAAGAGTNA GGCCAGCAAG ATNCCAGCG AA

SEQ ID NO:780: (Length of Sequence = 453 Nucleotides)

CTCTCTATTT TCTCTTTTCC TTTTGACCTA CCATAGGAGA CAGATTGCTC ATCTCCAAAT TTCTCTGCTG TCTGGGANT
GCTGGTTTT CAACCTTGGT TAGGGTTTGG CTTAGGAATA GCATAATATC CCTTTGTGAG AGGTAAACA CTTGAGTTAA
ATTTTGGAG CCAGGTGTGG TGGCTCATGC CTGTATCCC AGCACTTTGG GGGGCCAAGG TGGGCAGATC ACGAGGTCAG
GAGATCAAGA CCATCCCTGC CAATATGGTG AAAACCCGTC TTTACTAAGA ATACAATAAT TAGCTGGATG TGGTGGCACA
CGCTGTGGG TCCAGCTAC TTGGGAGGCT GAGGCGGAG AATCGCTTGA GNTGGGGAA GTGGAGGTTG CAGTINAGGT
GAGATCGGC CACTGCACIN CAGCTGGGN TGAGAGAGCA AGACTTCCGT TTC

SEQ ID NO:781: (Length of Sequence = 306 Nucleotides)

AAGCTACTCG GGAGGCTGAG GTGGGAGAAT CGCTTGAACC TGGGAGACGG AGGTTCAGAG GAGCCGAGAT TGGCCCATCA
CACTCCAGCC TGGGCGACAG AGTGAACTC CATCTCAAAA AAAAAAAGAA AGAACCACCA CTNTAACTGA GAAATAGATG
NTCCATTAA CAGTTTAGAA AATGTATATA ACTCTAATCC ACAGAGGTTT ATACTTACAA GCAACTCATG GTTCCCTTT
TAAGGCCAC ATGTGGAAAA TTAATCTGAA CAGTTAGTGC AAGGAGGAGT CATACTCAG TGGAAA

SEQ ID NO:782: (Length of Sequence = 443 Nucleotides)

GTCTGGGCT CCTGACCTCA GGTGATCTGC CTGCTCGGC CTCCAAAGT GCTGGGACTA CAGGCATGAG CCACTGCACC
TGGCCTAATT CTACATTTTN ATCTACAGCA GACCTTTTAT CATAAAAGAG TTCTATATAA ACATTTCTCA AAAGAAAATA

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ACCTCTCTTG TTATCCCCAC TTTTCATGCT CTATGTCCCA TAGGCAATTT GACAAAGACT GCTTTGACAA AGGATTCTTA
GACTTCTATC TCTACCTCTC ATCTGACTTG GCGGAGGAT TAGG

SEQ ID NO:771: (Length of Sequence = 357 Nucleotides)

CAGCTCACTG CAACCTCCAC CTCACAGGTT CAAGTGATTC CTTCCTCAN CTTCCCAAGT AGCTGGGACT ACCGGTGCAC
ACCACCATGT CCAGCTAATT TTTGTATTTT TNATTAGAGA CAGGGTTTCA CTATATGTTG GCCAGGCTGG TCTCAAACCT
CTGACCTCAA GTGATCCGCC CACCTCGGCG TCCCAAAATG CTGGGATTAC AGGTGTGAGC CACCATGCCC GGCTAAAIT
ATAGCTATTT TAGAATGTTG AAAGTAGTAT TATGTGATTT CAGTTTGCCA TAAATTTTC ATATGGTTAC TAATTATTTT
TNTTTTGTG GATATATCTT CTGGAAATCT ATTGAGG

SEQ ID NO:772: (Length of Sequence = 359 Nucleotides)

CCTCTCAGGA AAACACCTAG ACATTATGTA ATGTATTTGA AGATTAATGT ACCCTTTAAC CAGCAGTTGT GTACCTAGGT
ACAACTTTG CAAGCACACA CGCATGINTG TNC AAAAAG CACATACAAA AACACTCCTA ACAGCATTAT TTGTAATAAT
AAAATATAAG AAATTACCTA AATATCCATC GACTGCCATT GGTAGTATGG TTATACAATG GAATCTTACA CAGCAATGAA
AAGGAGCTAG AGCTACATGC AACACATGG ATACAACCTCA CAAACGTAAG ACTTAGTGGG AAAANGCTAG ACACAAAGTT
AACACCTTCT ATATGTGGGT TCCAGTTATA TAAAACCA

SEQ ID NO:773: (Length of Sequence = 361 Nucleotides)

GAGCCTACGG CAGAAAAGA AACATCTTCC TATAAAACT AGACAGAATA ATTCTCAGAA TCTGCTTGC GATGTGTGCG
TTCAACCCAC AGAGTAAAAC TTINCTTTG ATAGAGCAGT TTTGAAACAC TCTTTTGTGTA GTATTTCAT GTGTATTTT
AGAGCCCTT GAAGCCTACG CTAGAAATGG AATATCTCC CCATAAAACC AAGACAGAAG CAATCTCAGA AACTAATGTG
TGATGGCTGC ATTCCACACA CACGGTGGAC CATTTCTCTT GATAGAGCAG TTTTGAAACA CTCTTCTGT AGAATCTGCA
AGTGGGATAA TTGGGACCTC CTAGAGGGCC TTCGTTGGAA C

SEQ ID NO:774: (Length of Sequence = 387 Nucleotides)

GTTTCGCTCT TGTGCCCAG GCTGGAGTGC AATGGCGCAA TCTCGACTCA CCACAACCTC CGCCTCCCAG GTTCAAGCAA
TTCTCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGC ATGCGCCACT ACCCCAGCTA ATTTTGTATT TTNAGTAGAG
ATGGGGTTTC TCCATGTTGG TCAGGCTGGT CTTGAACCTC TGACCTCAGG TGATCCGCCT GCCTCGGCCT CCCAAAGTGC
TGGGATTACA GGCATAAGCC ACTGCGCCCA GCCAGAAGAT GCATGATTTT TTAGGATCAT ATGCTGTTTG TAGCCATAAG
GTAAATCATG TCTCTTCAA TCATGACTTT TGGGAACCTC CTGAATAATA AAAATGAGAG TTGAGAT

SEQ ID NO:775: (Length of Sequence = 401 Nucleotides)

GAATTTNICT TTCTGCATCG TTCGTGCTATA AAAAGGGGTA CTACTATAGA ATAGAATGCA GGCTTAGGAC CCCCCTAAGC
TCACTGTTCA ACCCAGCCCA GCAAACTGGT CAGTTATAAA TTTTNCCTGCA GGTCCCTGAA ACAACAACAA AAAACTGGAT
GAGGTTTCCC TCCATCTTG TTTTATGTCC TTGGGAGCTT GACCTTATAA CCATACGGCG GTACTTTTNC TTGGTCTCTG
CCATCCAGGG AACCAGAAIT TGGGGGGTTA TGTATAGTT AGCTCTAAAA ATTATCTTGA GCAGTTAAAA GCCTTTGCAA
GCTTAAATTT GACTGCTGTA GGNCCCTTCT GGGGAAGGAG CAATGGGAAA CCTTNCCTAA GCTTATAGCT CANCCAGCTG
A

SEQ ID NO:776: (Length of Sequence = 345 Nucleotides)

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ACAAAGTTGG AAGTACTCCT AATGGAGCGA AAGATTGCTT AAAAGCCATA ATGAAAAGGG TAAATCATAA GGTTCACAT
GTGCTCTGC AAGCACTAAC TCTTCTTGGG GCTTGTGTGG CAAACINIGG AAAGATATTT CATTTAGAAG TATGTTCCCG
TGGATTTTNC AACAGAAGTA CGTGTGTGA TTAATAATAA GGGCACATCC TAAAGTATGT G

SEQ ID NO:765: (Length of Sequence = 329 Nucleotides)

TTGTCTGCTT GATGCAGGAG CTGAGGAGCT GCACAGAAGG TTAAAGAGC TGTAACACAA ACAGGGCTGC AACATGCCCC
TTGCTCCCCA CAGGGAGAGA AGAGCTCTGG CCTCGGAGA AGCCAGACC TGGGAGCTCC TTGAGCCCGG GCTGTGACTC
CCTCTTTGGG GCCCCTGGTG GCGTCACTGC ATTGCGCAGT GCGACTGTG GAAGCTGCTT GTATGCGCC TGGTCCAGGG
GGAAGCTGTT TGTGTGTGC CTGGTCCAGC CACCTCATGG AGAGCCTGTG CTGGCACCTG GGAGCTGCCC AACCTGGGCA
GCAAGCTTT

SEQ ID NO:766: (Length of Sequence = 321 Nucleotides)

GCACTGGCAG GTAGATTTTA TTGGCTGGG ACACACAGGG GATACCTCA CCCAGATGG GGTGGGGGT GTGGTGTGA
AGATATAATC TATGGTCAC TTGTGGTGA ATCGGGGTT CTGGCTGINT TGGATGAAGG GGAGCCGAGG GCCAGGTTGG
CTGGTAGCTG CAAACCGAC TTCTCTGCTG GCTGCATCTG CACAGGGAGC TGGGGGAAG CAAGGAGTCC AGGGGCTGGA
TGCAGAGCTT GAGTCGGAGA AGCCAGTCTG CTGGTTAGCA TGINCCATCT GCTTTTNCAT GGCACGGCA CCACAGGCT
T

SEQ ID NO:767: (Length of Sequence = 313 Nucleotides)

ACCGCCCCCTC TAGTTCACCTA TTCTGTCCCC GGTACCCAGG GCATCATAGA CACTCAACAA CCATTGCTTG AATATGCAAT
TGGATGAAT GAATAACGA CCAGAGGAAT AATCCAGACA GAGCAGCAGT GGCCAAGGA AGGGAGGATT GATTTATGGG
AGAAAATTAG GGGAAATGAA TCCATAGAAA GGGTTTGCTT AAGTINAGAT GATGACTINGA GCCAGAAGAC ACCCGGGGA
GAGGAATINT TTCACATGGT AGGAAAAGGG GAGGAGGGAG AGAGGTGGG TGGTGGAGIN CAGCCTCGAG GCT

SEQ ID NO:768: (Length of Sequence = 372 Nucleotides)

TCTCTCTCT GCTGTTTTAT ATTCTGCACG TCCTTAGTAA CCCGTGGGC CACTTCTTA CTTAGGCTC TCCTAACATG
TATCTATGAC ACATTGATCC CTAACAGCTA TGATTCTNCT TACTATTIN CAGTAATTTA AATTTTATCA TTCTACTGCT
TGTTCAATAC ATCTCTCTAT GTAAATCTTG ACTCCATAAT GAGGTTTTTA ACTTGAAGG GGTGGAAGT TATCTGCTGC
CTGGTACCC CCCGCCATT ACACAAGAGT ACATTTTAAG CACATTACAC CTGAGTGATT GTNGTAAAC ACAGATGCAA
TCTTTCCACC ATCTCTAGG AATTCTCTG TGGGCTTCC ATGGGTTAC CC

SEQ ID NO:769: (Length of Sequence = 321 Nucleotides)

GCAGCCAGAG CTCCAAGGCT CCCCGGGGG ACGTGACGC CGAGGAGGCA GCAGGCGCTT CCCCCGGAA GGCCAACGGC
ATGGAGAATG GCCACGTGAA AAGCAATGGA GACTTATCCC CCAAGGGTGA AGGGGAGTCG CCCCCTGTGA ACGGAACAGA
TGAGGCAGCC GGGGCCACTN GCGATGCCAT CGAGCCAGCA CCCCTAGCC AGGGTGTGTA GGCCAAGGGG GAGGTCCCCC
CCAAGGAGAC CCCAAGAAG AAGAAGAAAT TINTTTTCAA GAAGCCTTTC AAATGAGCG GCCTGTCTT CAAGAGAAAT
C

SEQ ID NO:770: (Length of Sequence = 364 Nucleotides)

TTAAATCAGG AAATGTGATG CCTCCATCTA TGGTTTTTGA AAGTCATCAG CCAGAGCTAA GGTAATGAGG ATTCCCTCCT
TCATGTTCAAT ATGCTTTTAC ACTGTGCACA ACTGTCCCTA AAAAAACAA CCCCCTGGCA ATTTCTCCAG GCTTATGCTC
TCCCGGTTT CAGTTACATT TCAGCTTAGC ATTTTCAAAA TAACAATTG TTCTTGGCAG CCGTCTATA TATTINATTT

232

SEQ ID NO:758: (Length of Sequence = 356 Nucleotides)

TTTTTTTGTA TTCTTTTGT ATATGGGTTA AATGTTTCCG TTATATTCC TAATTGGCTA TTGCTGTAT AAATAGATGT
 GGTTTTAGGC ACATATTTTA TATCTGGCTC CTATACTAAA AATCTTTTAT CATTTCCAAC AGTTTTCAGT TATGCTCTTG
 GGTTTGAAGG TAGACAATAA TGTCACTAC ACATAATGAT ACINCTGTTT TCNCTTTTTA AATGCTTATA GCTCTTINAT
 TTTTATTGCT TTGCTTGTC TATAAATNCT AGAATGAAGT TAAATAATCA TAGCAGATAT CCTTTTTCCT GATTTAATTA
 TAATGCTCCT GAAATTTTAT TAAGTATGAT GACTGT

SEQ ID NO:759: (Length of Sequence = 333 Nucleotides)

GCCATGTGGG GCGGGGAGG CGGTGGGGTC GGGGGGGGG GACGGTCAA GACTTCATAA ATAAGAGGCG GGTCCAGAC
 CCNCAAATTT GTCAACATGT CTTAAATAGG TGCATTATTT AAATCTTATG TACAACAAGA ATCATTTCG ATAGCAATGG
 TGAGGACACA GGACGGGTC AGTGATGTGA CTGGGCTTC TTGTCCAAG GCGGGGGGC GAGTTCGAG CTCAGCTCGG
 AGCCTCTAGG AAGAAAGCAT CCTTCGTCCG GCGGCAATN GTGGCATCGG AGTTGACTTT TCCACACGA CGGCATCAAN
 CACAAAGGCA AAG

SEQ ID NO:760: (Length of Sequence = 311 Nucleotides)

CGTCTCTCT GCCAACCCG CCCCCACCA TTGCGAGGA GGCTGAAGAT GGAGATGGGT CCGGCAGCAT CTNCGGTTCC
 ACCGAGACC GCTTGGTGGC ATCAGCTTGC CCGGCCCGC CGCAGATATT CCGGCTCGA GAACAGCTCA TGCTGAGAGC
 CAACAGCCTG AAGAAAGCAA TTGTCAGAT CATAGAACAC ACAGAAAAG CTGTCGATGA GCAGAATGCC CAGACCCAGG
 AGCAGGAGG CTTCGTCTG GGGCTCTNIN AGTCAGAGN GAAGATNGAC CACAGAGTTT GNCCACCACT T

SEQ ID NO:761: (Length of Sequence = 314 Nucleotides)

TTTTTTTCT TTTTTTAAAG AGACAGGGTC TCACTCTCTT TCCAGGCTG GAGTGCAGTG GCAACGATCA TAGCTCACTG
 CATCTCGAA CTCCTGGCCC CAAGGGATCC TCCACTTTG GCCTCCCAA GCACTGAGAT TGCAGGCGTG AGACACCTCA
 CCTGGCTTGT CTGAGAACAT CTTTTAAAA AAATCCCTC TCTTGGGTTT TCTGTTACCC ATATGCTAC TCAATTTGGT
 TGCTCAGCT TTGTTGTGT AATGCAAAAG CAGCCATAGA CANTACATGC ATTGAATGAG TGTAGTGCAT TCCA

SEQ ID NO:762: (Length of Sequence = 319 Nucleotides)

ATAAAGGTAT ATAAAGTTG AAATTAAG ACACATATCA TGAAAATACT AACAAAAGC TATAATAGCT ATATTAATAT
 CAGGTAAAT AGACTTTAGG ACAAAGCAT TATTAAGGAA GGAAGTTG CTATAATAAT AAAAGGTGA GTTAATCAAA
 AAGATATAAT AGTTTTAAAC ATTATGCATA TAATTAANIT CCTCAAAAAT AGACAAAGCA CATATTGATA CTTAAGGNAG
 AAATTGATAA ATCCATCACC ACAGTGGGAA ATTAGGAAGT TTCTGTACAC CTCTTCACT TGTGATAGG TCAAATGGA

SEQ ID NO:763: (Length of Sequence = 369 Nucleotides)

TCCAAACCTC TGCCAGATAT AATCTAAAA ATCTGTTTGT TAATTTTATT ATTTTATTTT TGGATTTTAA AATGCTTGGG
 AATTGGGAGA TATGCACAAT TGTCTTTGCT TTGTTCAAA AATTAAATGC GTATTGGGT ACTTATAGGA CACTATTGT
 AAAACATTT ATTTCTTCAG ACATTGATGG TCTGTCCCA GTTATTAAAC ACATCTACAT GTTTAAGAAT AAATTTCTTA
 TCTACTTCTT ATTCCATGA AAATTACCTT TCTATCCTCC TACTCTGGAA GTCTTATGN ATTCTGTCTT AATCATTAGT
 ATCCCATGTC TTCTTCAAGA GGATGTCTGT CCAGTAGGAA TTTCTCCCA

SEQ ID NO:764: (Length of Sequence = 381 Nucleotides)

CGGTAGCAG TTGCTGAGTG TCAGTAGAC AGCAGGACT AGGGCTCGG GCGGGGAG ATGCTTTTNT TCACCGCCAA
 CCCCTTCGAG CAAGACGTGG AAAAAGCCAC GAATGAGTAC AACACTACAG AAGATTGGAG TCTTATTATG GACATATGTG

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TTATCTTGTA AAATAATTG TTCCATTTCT AATTAGTACA TAATGAGAGA GGCAGTGTGA TGGTTTGTGC CTAAGNCCTT
TCTTGCCAAG ACTTTCAAAG CCAAAAACCT CANCAGTTTT CCTAGATGAC TAGACAG

SEQ ID NO:752: (Length of Sequence = 359 Nucleotides)

AAGTCAGGCG TTCTGGGGC AGCTGTCTG TGAAGTTGGT GGGACGTGCT ACCCTGGGCC AGCTCCAGGT GAGCNTGGCT
TCGGTGGTCC CCGTGGGCTC CTNAGTGGCG AGGGTGAGGC CTGGCACTGG GCCTCTAACT GGCCCCGTGG CCCTGCAGTC
TTTNGTGTG GTGTCCCGCT TGCCCTTTNT CCGGCTGTTT CAAGCGCTGC TAAGCCTCAT CGNCCCCNAG TACTTTNACA
ANCTGGCGCC CTGNTCGAA GCAGGTGAGT GGCCATCANT CGTGGTCATC TTGNTCAT NATCCAGCT TTGGCCCCTG
GTGGGGCTCG GCAAGCAGCT TCTCCTGGG GAGGGTCTT

SEQ ID NO:753: (Length of Sequence = Nucleotides)

AGCTTCAACT TGGAAAGAAG GATGATGCAG TTTTGGGCCC TCCGGCCATC AATNACCGAC AGCNCCTTGA CCTTGGGGGA
AGCCAGGTAT ATGNTTCAG TGGAGCCAG CTCCTTCTGG TGCCCTCTGT AGGCTGAAAA CATCTTTTCA AAATCTCTA
GGTCCAGGNT CCGAAATACC TGCAATGTCAT CAATCTCATT CCATACGGTG CCAGGGACAC GCTCCTCATT CAGCTTCACC
CAGTTGAAGG ACTTCAGTGG GTGAGAAGGC TGGGGGACAC GCTTTTCTCT GAGTGGGACG

SEQ ID NO:754: (Length of Sequence = 342 Nucleotides)

CTGTTGAAGT GCAGGTTTGA TCCAGCCAGT ATAGAACTAG CTCTGTAGGG GTGAGGAGGA CTGNTCTGTG TATCATCCTT
GATTGNTTC CTTCAGGAG CATGCACTG TAAGTACATC AGAATGACAA ATTGATGAAC TGCAACAGTA TCTTTTGTG
AATGTTCCAC ATAATGCAAA TGCCATACGT TGTGTGAATA TTATGTTGGA ATACAGTGTG GATATCTTGG AAAACCATAA
CTGCCCTCTA ATTTAACATA GAGTAATACA TAGTNTCTGA TTTTTTTTAA AGTGAGCTNT AATGGGNAAG TATTTTNTAT
ATGCTTTTAC TATAGCTAAA GG

SEQ ID NO:755: (Length of Sequence = 321 Nucleotides)

CATTGCCATC TTCTCAGTCC TTCTCCCTTT CTTTCCAAGT AGTTTACGGC CCTAGGGCGA AGGTGGCTTT TATTTCTCT
CTTGGGGGAG GAGGGGGAGG GAGCTTTCCC AAGCACATCA ACCTAAGGAA GGGGTGGTTG CCCCCCAGC AGCGAGGGGC
TGGAACGTCT GATCATTCGG AAGGAAGGGT TCGTTCTTGT CCACTTCTG GCCCTTGGCT GCAAGGGTGT GCTTNGCAGG
GGTCACTCCC CTTGGGGGTG GCAGCTCTG CATCAGTNGA GGGCACAAGG AGGTATCTGC TGGTGTTCAC GAAGAGGAGG
G

SEQ ID NO:756: (Length of Sequence = 368 Nucleotides)

TGGCATGGTT GCATGTCCT GTAATCTCAG CTACTTGGAG GCTGAGGCAG GAGAATTGCT TGAACCTGGG AGGTGGAGTT
TGCACTGAGC CAAGATGCA CCACTGCACT CTAGCCTGGG TGACCGAGCA AGATTCATTT TCAAAATAAA TAAATAAATA
AATGAGAAAA AAATATAGAT ATAGTAAAGG GAACAATTAC ATTCTACAT ATTTTAGCAG AAGTAAATAT GGTTTAATTC
AATGGAACA GCTCTGCTCT ATNGAAAATT CACAAATATT AAAAATAAAC ACACTCTACA TTAAACCTCT GAGCACTAGA
NGCTTACCTA CTTATTCATA GGGCTCACAT ACTGTAAGGG GGGTAAAT

SEQ ID NO:757: (Length of Sequence = 339 Nucleotides)

CTTCCACTGC CAGGTTATCG TCCCGGGAAG CCCCCACCC CCTCGNTTC CTCCTCCGCT TTCCCTAACC CGTCTCGGG
GGGCATCTAC GNTCTGCTCT CGNCTCTCT CTNCTGAAAC TCCCTTGTG CGTGGGCGT GGCGTCTGG TACTGCTGGT
ACTCGGACAC CAGGTGCTTC ATGTTGCTCT CGGCTCGGT GAACTCCATC TCGTCCATGC CTTNNCGT NTACCAGTGC
AGGAAGGCCT TTGNCGGAA CATGGCGTG AACTGCTCGG AGATGCGCTT NAACAGNTCC TGGGATGGCC GTGCTGTTTC
CGATGAAGGT GGCCGACAT

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CAGCGTGCAC TGCAGGGAAA CGGTGGGTGG AGGGATAGGA AGGCCCTCAC GCTCCCAACC CACGGAGAAA NTGCAGATGG
 TGACAAGCTG CATCTGGACT CCAGGNTGTA TCTGACAAAG AGGGAGATGG TNCCTCCNT CCCTNCACC AGCTCCACTT
 TTINCTGCTGA AGAAACAGAG ATGTGGAGGC AGGCGTGACC T

SEQ ID NO:746: (Length of Sequence = 285 Nucleotides)

GIGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AAAC TAAGAA TAGTAACATA
 GCTTTCAGCA TCCGTGCTT GAACATCACA CATCTACAAG TCTTCAAGN CTTAATGCAA CAGGAATNTG TCTGGAGACC
 AGCAAGANCA TCAATAGAGA GCACTGNTCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCACAC AACGGATTNT
 TAGGGGAGGA TTTGGGNGAA GCAGCCATT TGCTTAATAC ATTGG

SEQ ID NO:747: (Length of Sequence = 302 Nucleotides)

CAATGCAGTT TTAGAGTGCT CATCTTTTCA ACTTATTTGA CAAATATTTA CTGAATGTCT GCCATAAGGC AGTAAAGGCA
 CAGAACTACT CAAAGCCTTT TINCCCTTAT GGGGTGTAAT TNCAGTGGT GGAGACAGAC AATGAGCAAG TAAACAATCA
 ATCGGCTAAT GATAACTACT GTGAAGAAAA TAAAGCAGN CAAGGGAATA GAGTATGCCA TCATTAAGAC TGGTTAGGGA
 AAGCTTCTTT GAAGACATGG CAGCTATTGA AAACCTGACT GATACAAAGA AGCAAGTCAT GT

SEQ ID NO:748: (Length of Sequence = 346 Nucleotides)

GAGACCAGCC TGGGCAACAC ACTGAAACCC TCCTCTCTAA AAAGAAGAAA AAAATAAGAG TTTTGAGTTT TTCCAAAGAA
 GAATGCTCAG TACGTTGTIN ATCTATCAGA AAGAAGAATC TGGAGGTCTT GACGTGTAAA CAGAGTTGTG GGTACCATCT
 CACCAGAATT GCTGCCCTGA AGCCAAAGGA CTGAGCTGCT CAGATCTGGA AGTAATCTGA GCCCCCATTT CCAAGAAGAG
 AATTGCAGAA TTTTATAGGA AGAAGGGACC TGATCCCTGT CAATGGAAGC ATTTTAAAT TTTTAACTGA AGTCCAGGA
 GCATACAAA AGCCAGGNA TTTACC

SEQ ID NO:749: (Length of Sequence = 325 Nucleotides)

CTAACTTTA TTTTCAAAG CTTAAGGCC AAATACAAAC TGAGGTCTTC CTTCCTAACA AATTAATACT AAAATGAAAC
 AGCTTTTNTT GTGCTCTTAA GACAAATAA GGAAGGAAAA CGTAGCTGCA GTTGCTCCAG ATGGATATTG GTTCTTTTAA
 ATATATCTGA AAGTAGTAGT CAGAAATGANT TATGGTTTGA AACTGAGN ATCTTCTGGT TGCAGGTGCA AAGTGACTTT
 NNTTATCTT GTCTCAGTCT CCTTGATAGC CACTTCACTC TGCTACTACT CAACCTTCTC CTAAAAATAC TTCATCTATT
 TTCAG

SEQ ID NO:750: (Length of Sequence = 341 Nucleotides)

TGTATTTTNA GTAGAGAAGG GGTTCGCCA AGTTGNCAG GCTGGTCTCG AACTCCTGAT CTCAGGAGAT CGGCTGCCT
 CGGCTCCCA AAATGCTGGG ATTATAGGCG TGACACTGTC TCTGGTTTAA GAGAACCATG GGCTGAGATA TINAGGAATT
 CTCCAGGCA CCAATCTTGG GGCATGCAGC CTCTCCGTA CCCACAGCA TCTNGGGAG CTGGTGTGCT GATGGGGTCA
 GCTCTCCAG CTGCTGGAA AATTCTCAGA CACTCCCTTA GAGGACATCT CCACCCCTNC CACTCTNAGC TCACTGCTTT
 CTAACATTGC TCATTGTGTT G

SEQ ID NO:751: (Length of Sequence = 377 Nucleotides)

TTTTTTGAGA CGGAGCTTNG CTCTGTCACC CAGGCTGGAG TGAGTAAGC CCATCTCTGC TCACTGCAAG CTTACACCAT
 TCTCTGCCT CAGCTTCCA AGTAGCTGG ACCACAGATG CCGCCACCA TGCCCGGCTA ATTTTTTGTG TGTGTGTTTT
 TAGTAGAGAT GGGGTTTAC CATGTAGCC AGGATGGTCT GGCCCTCCAG CTTCCTCTGA GTCCCTTCAT AAACATTTGT

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GCGTAGTAT TTCCTTAAAT AACAGGTAC AATAGAAAGA TACTGCCTGG AAGTTATCCT TTTCATTTTG GTTCATTTTC
AGTTTTTGTT TATGATTAC ATAGCTGTTT AATTCATTTG CTTATAGTAC AATCCTGCCA TAAAGTATTA AAGCACAAGA
TACCTGTTAT TCCCTCAAC ATCTGCATTT TTCAAGNTT TTATACTCTA TATCCACAGT ATGTCAGCAG TTCCTGACTG

SEQ ID NO:740: (Length of Sequence = 374 Nucleotides)

ATGTCAGAT TCACCAAGGT TGAAATGAAA TAAAAAATGG TAAGGGCAGC CAGACAGAAA GTTCAGGTTA CCCACAAAGG
GAAGCCCATC AGACTAACAG CAGCTCTCTC GGCAGAAACC CTACAAGCCA GAAGAGAGTG GGAGCCAATA TTCAACATTC
TTAAAGAAAA GANTTTTCAA CCCAGANITT CATATTCAGC CAAACTAAGC TTCATAAGTG AAGGAGANAT AAAATCCTTT
ACAGNCAAGC AAATGCTGAG GGATTCTGTC ACTNCCAGAC CTGCCCTACA AGAGGTCTCG AAAGGANGCA CTAAACATGG
AAAGGGNATA ACTGGTACCA GNCAGTCAA AAACATACCA AAATTGTAAA GGGA

SEQ ID NO:741: (Length of Sequence = 290 Nucleotides)

AATTATTTCA TAATAATGTA ATAAACATTC ATGAACATAC CCTATCAAGC AAGAGCTAGA ACCTTGGCAA TCATTTCCCTT
GACTCCTCCA GTTTGTTGGCT ATCATGATAT TCAGCCCCAA GTTCATCATT TCTGTTTTIN CTCTATACA GGTTCTTAT
ATGATTTTCT AAAAATCATT GGTATTTC ACTTTGTAAA AAGTCATTGT NCTATTTTCC CCACTAGTTC TACATTGCAT
TCATATTGTT GTGGGTTGTG GTAATTCATT NATTTTGACT GCTGTATAAT

SEQ ID NO:742: (Length of Sequence = 274 Nucleotides)

TTAAGAGGAA AAGTATCITT AGGAATTINT TTCTATAGAG TTCTTCATTA ACATTATAC GAGTTTTTTG CTGAGTCAGA
TGGACAGTTG GGTTCGTATG CTTTINCCCT CCCGCTGCC AGGCTGGCCC AGGCAGTGCT CCCACCANTC TATGAGOGTN
TCCGGGGCCG NGGATCTGGG CAGCATCCAT GTGCGGGG CCATCCCCAG CGGNACCACA AGGTNGCAGC GTTGTCCAC
GAAANACCGN CTTTCGCTC TGCTTCCCCA AAGG

SEQ ID NO:743: (Length of Sequence = 398 Nucleotides)

TGCTTTGCA GTTATCTGGA ACTCCTCGTG CTCTTTCAGG AGCTCCTGGG TGTGCTGTAT ACTGGAGCCC GTGGAGGTGT
GTTGGGAAAG GTAGAACTCG CCATTGTAT GGATCCATC CAAAGCCTGC TTGGCACTCC TCTCAAAGAC CAGTACTGC
TGACACTGGT CCAGCGTCT CTCTCTCATG GTCCAGTAAT GCAATACCT GTTCTCCCGT TGAAGAGTIT CATTCAAGAT
ATTTTTCACT TGCTGTTCAG GAGCTTTGAT GTGGCTCACC ATTCTGGCA TGTTCAGCT TGTCTCTGTG CAGGATTTCA
AGGAAGACGT CTGCATINCT CCGAGCAAGN GGTGCAAGCC TTCAGGAATG CCTCCTTINC TNCAGGGTGC GGTTTTCA

SEQ ID NO:744: (Length of Sequence = 359 Nucleotides)

TGCGACAGAG TCTTGCACTG TCACCTGGGC TGGAGTGAG TGGTGCAATC TCAGCTCACT GCAACCTCTG CCTTCGGGT
TCAAGCCATT CTCCTGCCTC AGCCTCCAG GTAGCTGGGA TTACAGGCAC CTGCCACCAT GCCAGCTAA CTTTTTGTAT
TGTTTTTTTT AGTAGAGATG GGGTTTCACT ATGTGGCCA GCGTGGTCTC AAACCTCTGA CCTCGTGATC TGTGGCCIN
GGCCCCCAA AGTTCCTGGA GTACAGGCT GAACCAACGN GNCCTGCTGG GCTGCTTAT TTAAATCCC TAGAAGAGG
GATTCINCA CTACACCACA CCTTAACTT NGAGGACC

SEQ ID NO:745: (Length of Sequence = 361 Nucleotides)

CCCTAATTA AAAGTTTTAT TTTTAAAAA OGTAACAGAC CACTCTAAGA AACTTTGGCA TTCAAAGCAG TAGTACTGT
TATTTGCTAA CTCTGAAAAA AAAATTTTNC CCTCACAAA CAACCGCAA ACTCCTGCCA CTTCCTAGCT TGGTGGCTGC

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TACCTAGCTA GCCCTCAACC TCTTTGTTTT ATGAATGGAA AGGCTGGGAC CCAGACAGGG CAAGTGACTC ACCCAGTGTG
ACAGAGCTGT TAAATGGCAG AGCATGATG AATCGGGCCA TGACTACTTT CCTACATGAC ATATTGAAAC CAGTTTGAGG
CCTCGGTTTC CTCTCTNGCA AACAGAGAT ACTAATG

SEQ ID NO:734: (Length of Sequence = 374 Nucleotides)

TGGTGAAAGA AGAGAAGGAA ACCTTGGTCT GCATGGCACT TGGTACTTTT GTATTGCCTC CATGCCCTCC ACTGCAGCTC
CTGCCCTGCT CTGTGTGCAT CCTTCATGAG ACTCAAGACA GATAACCTCT CCTTGCCTTT TCATGTCCCA GCCCTGGNTC
TTGGACTCAA CCATCCATIG CATCCCCATG GAGGATTCTG CCAGTCTCA GGAATCAGGA GCAACCCAAG GATGTCCAG
GGTCACAGGA AGACTTGTG AGGGGACCA CAGGGGTGCC CACAAATTAT CAGTCCATGG AGAAAAGTAG AGAGGGAGGC
TCAAGGACCT CAGCACGTAA GGGACATTTT GAATTCTACA AGTCACGGTG GGAT

SEQ ID NO:735: (Length of Sequence = 348 Nucleotides)

CCCAGCGCT GGAGAGCCAG CCTTCAGGG TGGCTGGGC GAGCCAACT GCGTTCTCGG TGCAGGGCTT CGGGTCTCCC
TAACAGACCT TATACGCTGA CCGCGGGCCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGGACGACC ACATTGCTCC
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGGGAATCGT TTTCTCCGCG TGCCCTGTCA GCGCTCATG GTGCCAGAG
AGGAATTTTA GTGGCAGCAT TCGGCTGTC ACGCCACCGA AATTGCCAGG NCACTCCAAG TCAGAAGGAC CACCAGGAAA
AGTCAGGAAG AGAACCACCC ATCAAGGT

SEQ ID NO:736: (Length of Sequence = Nucleotides)

ACACTCTGA CCTCAGCAA TCCTCCACC TCAGCCTCCC AAGGTGCTGG GATTACAGGC ATGAGCCACT GCGCCAGCC
TACACACACT CTTAATAGAA GAAATGAATA ATCAAAAAAT ATTATTGTG GAAAAAATGT TTGAATCTTA TTTTAAAAAT
AATTAAACNT TTCAATAGGC ATGTTGAACC TTTTTCGCG TACTGTTTC AGCAATTGCA GTTGAATGAG TACAAAATGC
ACCACAGAAT AGAGACTGCT ATCTACCCAA ATATTGCTGG TTGTTGAATC CATGGTAGGG AATTTCATG TATTGTTACA
ACCNGCTATA AATACATCCC AAAATATGTG TAGAGCTAAA ATAGATG

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SEQ ID NO:737: (Length of Sequence = 243 Nucleotides)

TTAATCATTC AAATTCATT TTATACAACG AGTGATACA CCCTGGGGG AGTNTCTGAC TGATGCGTGG GAGGGCGGGC
GGGGATGTCT NCAGCTATGA GTAGGGAGGA GCGGGGAAG CCCTGGGTGC TTCCTCTCCT CGACTGACCG CTGTGTGTTT
GTCCCAGAG GAAGAGCGGN NGCAGTCAG CCCGGGGGG GATGCCACAN TGGAGAGACG GACCTGCAGA AGTGGTGGCC
AAG

SEQ ID NO:738: (Length of Sequence = 358 Nucleotides)

CGAGTCAGAG CTGGACAGCG GCGATGCCAT CTTTACATGG CCAGACCGAG AGAAGGGCAA ACTCTGCAT GGTGAGAATG
GCTCTGTACC CAACGGGCAG ACCCTCTNA AGGCCAGGAG CCGCGGGAG GAGATCCTGT AGCCACCTGG TCTGTCTCCT
CAGGCGAGGG CCCAGCACAC TNCOCGGCCA GTCTCTCTAC CTCCCGAGTN TGCGGGCAGC TNCGTGCCA GCATCTGCTG
GTCATTTGCG CCTGACAGTC CCAACAGAA CCCCTNGGA CTGGAATCCA GAGANGTCT CCAGGNAACC CCTCAACGAA
GCTGTGAAAT GAAGAGGTTT CTTCTTTAA ACTGGTTT

SEQ ID NO:739: (Length of Sequence = 400 Nucleotides)

CATTTCTGGC CAGGCACGGT GGTCATGCC TGTAAATCCCA GCATTTTGG AGGCCAGGC AGGCGGATCA CGAGGTCAGG
AGATGGTCTA GACCATCTG GCTAACACAG TGAAACCTG TCTCTACTAA AAATACAAA AATTAGCTGG GCGTGGTGGC

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CCCTTAAGC AGCGGATCCC CTGGTCCCCA CCCCCAACTT TATATTCATT AGGCCTGAGG TGGGGCCTGG GAATCTGGAT
 TTATAAATG CTCCCTATG ATTCCAATGC CAGTGGGTTT TAGACCACAT TTGAGAAAC AGTGCIGTAA ACTGTTTTCC
 ATTTGCAATG AAGGAAATG TAGGGTTTGT GTCTGAAAC TATGCAGAGA AATTGAATAG TATTINAGTC TAATCTTGCT
 TTTAAATAAC ACGGAAATTT TGAAAGTCGG CTTTAGGGAG TTCCAGAACC TGTCATGAA CAGCAACAAG AAAGATCCCN
 GTGTGAAAT GAACACTGGT TGGTAAAA

SEQ ID NO:728: (Length of Sequence = 305 Nucleotides)

TGTTTATTA TAATCTTATA CAGTCTACAT AAATTTGAAC TTGTATTTAT TTGGGTTTCA TTATAACATA GCATAATAAA
 AATCALAGCA CTGGTCTCTT GAAATAAAGC AGGCAATCAC CATTCAATAA ACACACTTGA TTTATTTTGT ATAAAAGGT
 TAAGTTTACA ACTAACTTT TATAAANGT TTAGCATGAA TAAGTACATC ATTACACTTT TGAATGCAGA AATAGACATC
 TCTGCCACTA TACAAGAAAA CTCTAATTAA AGAGTTTACA AGGTTTCACT CAAATAGATA TATTT

SEQ ID NO:729: (Length of Sequence = 383 Nucleotides)

CAGACATTT ATTTTCTAT TTTCCATGAA GAAGGAGAGG GACAATTTTA GATTCACCAG TGTGCAGGAC AAATCTCTAC
 TTAACCTATA GAGGAGCAAA CTTTCTTCAA ACACATTACC AATACAATTG TAATACTAAG AATCAATACC ATAGTTCTCG
 ATGTAGCATG ACTACAAATT GTCACAGTAG ATTTTGGATG ACTTTACCAT AGCCACACTT AATGAATTAT TATTINATTT
 NCTATTGTGA CTTTAATAAA ACTATATTTT AAACTTTAAA ATTGTCATTT AAATTACTAA AGAAAATGAG TAGTTCOCAT
 AATGAATCCA TAATGTTANG AATTGCTTT AGCAAATGAG GACTATATTC ACCTANGCTT TTG

SEQ ID NO:730: (Length of Sequence = 311 Nucleotides)

CTCTTTTAT CCCTTAACCTG CTTAACAAAA GAAAGAGTCT CCAAAGTTTA AAAAAACCTTT GAAAAATATA CAGCTTGATA
 TTATTTACAT AAAATATGAN TCCAGGTTCC AATATCAAAC AAACATTTGCT ATGTCAGAAA CACAGTGGAA GGCAGGAACG
 TAATCTACTG CCTTTAGAT GCAAAGACTA ATAGACACGT TCTCCNATCT CGACTATCTT NGTTACCTGT TATCCTCANA
 ACATAATTA TTANGGCACC TGNGAGGTG GATGACTACC GAAAATGGNC TTCATACCTT CTGTATGATT A

SEQ ID NO:731: (Length of Sequence = 349 Nucleotides)

AGGGAATGC ACAGAATTCT ACTAAAATAA CAGCAAAATA AGAGAGCATG AATTACATAT CAAATTATTT AAAGCAAATA
 ATTTACAAA TTTCTGGAAC AGACAGAAAG CAGATGAGTC TACCAAGAAG GATAATAAAC AATGACACCA GAGAAAAACC
 ACAACCTGAA AACTTAAGAA AACTGCCATA GAGGTGTGAG CCAGAGCTCC CAGGAGCCCT ACAGTGCTCC AAGCTCAGAA
 CTGGCAGTA TCAAAGTCAA GAATGCTATG GGGTAGCTAG GCCTCTTGAC TTTCTCTTCT CTCTCCATTC ATAGACAAGA
 AAGCAATCT ACCTTAGGT GGCCTAGAA

SEQ ID NO:732: (Length of Sequence = 370 Nucleotides)

AAATTGTGTC CTCTAGCCTA GAAGCAATCA AACTCCAACCT GGTCGTCTG ACTGANCTAC GCATGGATAC GCCATTCTTC
 TGAGGACCT TAGACCAACC CCAGGAGGAG CCTGACTTC TGTCCCCAT TTATGCCCC TTTTCAAGCA GGAAGTAGCC
 AGAAAGAGTC ATTGCCCAA ACCACCTAAC AGCAGTTGGG GTGACGTCTC CACAGGGGGG AAATGTTATA GGAGTTATTA
 AGAAATATC TTAGGCAGAT AGAGAGCAAA AGGGTCTCTT GGGAAATTTT TGTTCTTTT AAAGTAGCTG CAGAAATGTT
 TCTGCTTAG CAGGAAAAGC CCCAGCTCTT TAAAGCTGGG GCCAGCAATC

SEQ ID NO:733: (Length of Sequence = 357 Nucleotides)

TTTTTGGTG GTAGAGACA AGGTCTTGCT ATGTTACTAA GGCTAGAGAT CCTTTAAAA TGCTTTCTG CTAGGTTGTT
 GGGCCATCAC CTCTCCTTTG TTTCTTCTC CTCTCCAGC TTCTCTGGAT TCCATCTGTT TCTTATACTG AGAAGTTTGC

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AAAAGATTG AACAGATAAT TCATCCAAAA AAAATATGGG TGGGAAAAAA AGCACATGAA AAGATGCTCA ATATCATTAG
 ACATTAGAA AATATAAATT AAAACCACAA TGCAATATCA CCTCGTATCT ATTAGAATGT CTAATATTAG CAAGACTGGC
 CATATAGAGT GTTGGTGAGG ATGTGAACAA CTGAAACTCA TACACAGTGC AGGTGGAAAT GTAAATGATA CAATTTTTTT
 GGAAAAGAGT TGGCTGTTTC TTCAAAGTT AAACATTACA TCTGCCATAT GNTCCAGACA TTCCACTCCT AAG

SEQ ID NO:722: (Length of Sequence = 266 Nucleotides)

ATCGTGCCAC TGCCTGCAG CCTGGGCGAC AGAGGAAGAC GCCATCTCAA AAACAGAAAA AAAAAAAAAA AAAAAAAAAA
 AGTGCAGCTC TCTAATGGG CTCTTTTACT TACTATTTAT ATAATAAAG CCAAGTTCTT AGGCTGTATA ATGGGGTTAA
 TCATAGTAAG TACCTTGTA AGTTACTGTG ATAACCAAAT AAGTGANCA AAGTAAAGCA TTTTACATGT GTGCAGCTTA
 ATAAGTTGGA GTTGTGACTA TTATTT

SEQ ID NO:723: (Length of Sequence = 370 Nucleotides)

ATTATTCATG AAATAATCCA TGTAACATCA CTTAGCACTG AGAGTTAACA AAGGCAAATG TTACCTGAAT AGGAGGAAAC
 AGAGGAAGAA CAACGAGGTC TCTTTTATCT ATGCTAAGCT TTGCTGAAT AGGAGAGAAA TGTGTGGCCT GTTGGTGAAT
 TTATGCTTT GTGGTAGTAA TGGATTYYCC TAAAGCTGTT TCCCTCTGAT CATTATAAT CCTGTACAG CAAAGGACTA
 TTGCTCTTG GTATGAGTAA ATAACCTGT TGAAGCACC GCTTATCTTC AGACCACAGC GCATACTTCT TACTGGAAAA
 TATAATGCAG GTGCCAACAC CCAAGGGCA TGACCAGGG TTCCCTTCC

SEQ ID NO:724: (Length of Sequence = 478 Nucleotides)

GGACACAAC GAAGTGTGGA AGAAATGAAA GGGCGAAGGT GTGTTTIGAG AAGGCTCTGG AAGAAAAGCC CAACAACCCA
 GAATTCCTCT CTGGACTGGC AATTGCGATG TACCATCTGG ATAATCACCC AGAGAAACAG TTCTCTACTG ATGTTTTGAA
 GCAGGCCATT GAGCTGAGTC CTGATAACCA ATACGTCAAG GTTCTCTTGG GCTGAACT GCAGAAGATG AATAAAGAAG
 CTGAAGGAGA GCAGTTTGT GAAGAAGCT TGGAAAAGTC TCCTTGCCAA ACAGATGTCC TCCGCACTGC AGCCAAATTT
 TACAGAAGAA AAGGTGACCT AGACAAAGCT ATTGAAGTGT TTCAACGGG TGTGGGAAT CCACACCAA CCAATGGCTA
 CCTCTATCAC CAGATTGGGG TGCTGCTACA AGGCAAAAGT AAGGCCAAT GCAGANTACA GGGGGATCTG AAGCTAGT

SEQ ID NO:725: (Length of Sequence = 356 Nucleotides)

GACAGAGGAG AATAAATGGA ATAACCTAGT TTGTGAAAG ACTCACAGTA TCACTTGGTT TCTGGACACG GTTCGAGACC
 TGGCTGTGGC TTGCTGTGGC CTGAGAGCC ATCCACAGC AGCAATGCTG TTGGACCTT TGGCTGGGAC CTTCAGGACC
 CCTGCAACA GCACGTGTG CTAACCTGC TGGCATGATG CCCCTTNTT GACAGGGCTG CATACAAGGC CAGGACAAG
 TGGCAGGCAG TGACCCAGC CTGATTGTC TGAGGGCACA CGCCATGCTT CTGCACTGC CAGTGTCTT CTNGGTCCAC
 TTTGCAGCAA GGATAGATGT GGTCTAGAT CCAAGA

SEQ ID NO:726: (Length of Sequence = 387 Nucleotides)

GTGGTAGAGT AAATCCTATT ATATCGAGAT ATGGTCAGG CAAGAATTTT NCTTTTAAAA TAATTTATTG TAAATGAACC
 ATAAATTTT NACCTTGTG CCATCTTCTA GGCTATAAAA TAGTCTTATA AAGAATCAGA TTGTAAAGAG TATATGAAAT
 GTGGATATGG ATGTGGAAGA TCCATAACGA GGATGATGAA AGCACATTAA GAAGCTTCT GATGGGTACA AAAAATAGAA
 TGAAGAAGAT CTAGTATTG AGAGCACAAC AGGGTACTA TAGTCAACAA TAATTTATTG TGCAATTTCA CATAACTAA
 AAGTATAATT GGGATTGTAA CAGAAAGGAT AACTGCTTTG AGTGATGGG ATACCCCAT TTACCC

SEQ ID NO:727: (Length of Sequence = 348 Nucleotides)

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CAGTAAATCT CTTACATCCT TCCCAAAAAT CAGTGTCTAG GGAAGTAGTG ATCTGGATGA GTTATACATG ATATTGACT
 TTNCATAAGT AGTGGGAAGT TTTACTAAGT AAAGATCTGA GTTCTTGGT ATCTGACGTT TGTATACAGA TGGTGTCCAT
 TTGCTCAACC AGACAGGAGT TAACTTGTAT TAGAATTGTT TTINCTAAAG TNATGTTACC TGAGAAATTA AGGACTGCAC
 CTGGTTTAAT GTTGCTTCAC TTATCCACC CTACAGAGAC CAGCAAGGTT CTGCCAGGOC TCGAGCATCC AAGCATGATT
 TTCCTGTGAC AAAATCTAAA AATCCAACC

SEQ ID NO:715: (Length of Sequence = 302 Nucleotides)

ATATTGAAA AGATCTTCAC CAAAGATATA TGGATAGTAA GTAAATATAT GAAAGGTTTT CACTGTTAAT GATTAAAGGA
 AATGCAATCT TGTACATGAA TGTTTATAAC AGCATCATT ATAAGAGCCA AAAGGTAGAA ACAATCCAAA TGTTCATCAA
 CTGATGAATG ANTACACAAA ACATAGTATT ATCTATATAA TGGAATATTA CTTGGCCATA AAAAGAAATG AACTGGGCCA
 GCGCAATGA CTTACGCCCTG TAATCCAGC ACTTTGGGAG GCTNAGGTGG GCGGACTGCT TT

SEQ ID NO:716: (Length of Sequence = 314 Nucleotides)

GTATTTTATAG TAGAGACGGG GTTTCACCGT GTTAGCCAGG ATGGTCTTGA TCTCCCTACC TCGTGATCCG CCCACCTGG
 CCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCACCTGCGC CCCACCCCAT TTTGGTGIGA TCTCAGCTCA CTGCAACCTA
 CCCCTCCCAA GTTCAAGTGA TTCTCCTACC TCAGCCTNNT GAGTAGCTGG GATTACAGGG GTCTGCCACC ACGNCTGGCT
 GATTTTCCTA TTTINAGTIG ACACTGCATT TCACCAGGNT GGCCAGGCTG GTCTCGATCT CCCTGACAAG AGGG

SEQ ID NO:717: (Length of Sequence = 279 Nucleotides)

ATAAAAATGC TACAGATTTT TGTATGTGA TTTTATCA TGCAATTTCA CTGAATTTGT TTTTCAGTTA TAACAGTTTT
 CTTATGGAGT CTTTGGTTTT TNCCAAATAC AAGATCATAT CATCTGCAAT CAAGGATAAT TTAGCTTCCT CCTTTCCAAT
 TTAGATGTCC ATTATTTTTT CTCTGTCTG ATTGCTCTAG CTAGGATTTT CAGTACTATG TTGAATAACA ATGGTGAAG
 TGGGTATCCT TGTATATTC CAGGGTCTG GAGGAAAGG

SEQ ID NO:718: (Length of Sequence = 161 Nucleotides)

AAGAAAAAAA CATAAATAAT ATTAGAAATG GAAAAGTTAT AAATCAACTA CAGCAAGGNT TTAAACTAT TATGAAACAA
 ACCAAGTAGA AAGTAGATCT GCCAAACAAA AAAGGAAAGA NACTGTTTCT TTCATAAATA ANTGACAATG GGGGAAAAAG
 A

SEQ ID NO:719: (Length of Sequence = 220 Nucleotides)

GACAGAATTT TTTTTTTTT TTTTGTGA GACAGAATCT CGCTCTGICA CCCAGGCTAG AGTGCAATGG CGCAATCTCG
 GCTCACTTCA ACCTCTGCTG TCACAAATAA ACATCAGTAA GAGCCAGCAG TTGCTCTAGG ATCTCAGTCA GCAAGCTTGG
 GGGCTGTGAG GAAACCAGCA GTCACCTGTT TCTCCCTCTC CCAGCCAGG GCTGACCCCT

SEQ ID NO:720: (Length of Sequence = 347 Nucleotides)

AGAAATGAAA GCTACATTAA CGAAAAAGGA ACTTAGGAAT GAGGTCAATTA AATATAACTA ACTACATTTT AAATACGGAT
 ATCATATATT TCCTGATTAG TATCAGGTAA ATATCTAGAC TCCTATCTG AATTCCGGTC TCAGATAAAA AGGTCAGAGA
 CAATTACAAG GAAGATGCTT CATATTATCA GGTCAATATA TACCTAATTA TGTGCACTGG AGAGTAATTT ATTCTTCATT
 ATCAITTGTA AACATGTGTT TTTACATTT TGTAGTTGT CCATAATGTA AGCTTGTGGG TTTGATTATT GTTTCCACA
 CTGGATCCAG CTGGTTTAAA CCTATTT

SEQ ID NO:721: (Length of Sequence = 313 Nucleotides)

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ATACCTAGAA ATTTTGATAA ATACTTGTTA AACAAACAAA AATAAACAT CCACAGCAAG GANTCGACTA TAAGGCGTTG
GTTG

SEQ ID NO:708: (Length of Sequence = 325 Nucleotides)

GGGCTCATAC ACAGTTTTAT TTCTGTGA TTTTACAGAC ACTCCATCCT GCAAGCCCAT TCCCTTGGAA AACCCAGAAA
GAGTGGGCAC AGTGCTCCCT AGAGGAATAG AGGGGACAAG ATGGCTGCCA GGGAGAGGGC AGTTGAGGCA CTTAGGGATT
TACTCCGCC CTGATGGAAG ATCTGGTGCC CAGGGTAGGG GGAGAGGGCC TGGGCTGGGC TGGAGCCTCC TAGGTATTTT
CCAGAAGCCC CTTCAGGAAC TGTCACCTGG ACTCCAGCAC CACCCCTCGT CATGTTGTCA CTCTCTGTGG TGGCGGAGC
GCAGG

SEQ ID NO:709: (Length of Sequence = 264 Nucleotides)

GGGCCCCGTT GCATGAGGCA CTTTGTCAA ATGAGCAGAT ACGTATGAGC ACTGAACTCT TGAGTGAATC AACCAGAACT
AAGACCCAGA TCCACGCACT CAGGAAGTTG CTCTGAATTT CAGTTTGACA ACAGAGAAGT AGAATATTTT TAATTAGCTA
ATATATATAC ACATTTTTTA ATCATCCAAA ATTACAGGCA AATCACTTAA GGTCCCCAGC ACTTTACGNT GNAAGGTCAG
AGAGANCCCC ACAAAAAGG TGTT

SEQ ID NO:710: (Length of Sequence = 366 Nucleotides)

ATTTTTATTA TATACATATC AGTACTCACA ATACGTGCT TATTTAAGAT GGCTGTTTAT AAGTATAAAG CAGTTTGAGC
AACACTGATT GTGCATTATT GTACTTCAGA TGAAAATCC TTACATGCGG AATCAATGTC TTTTAAAATT TCAGATAAAG
AATTINCATT TGAGGNGACA TACAATTGTA AGTGCTCATT TTTTGTCAAT TTTAAGACAC CATTATGTGT AAGANGGATT
AATTITNCCA TAAATTTACA AACACCTCC ATGTCITGAC ATTCACATGG AAAGGGCAGC ATAACCATTT AATCATCCAA
ATGCATATCA GAGCAAACTC CTAGGGCCTT TAGGTGTGAG GTTGGA

SEQ ID NO:711: (Length of Sequence = 216 Nucleotides)

GAAAAGCAGA AAAAAGTGGG GAAGATTTT TATCTGAAC TTGTGAGCTG GAGAATTACC ATTAGTAGCC CACTAATAGG
TTATGGCCGA TGAGTCCCTT CATAACACAC TGAGAGCCAC TTTTGACACT CCCAGAAAAG GCAGGTTAAC AAAACCCCTT
GATGGAAGCT TAGACCCTCA TTGCCAGTG TACCAAGCC TCTTTGAACC TTGCCT

SEQ ID NO:712: (Length of Sequence = 276 Nucleotides)

ATTTTTTCC CATAGCACGT ATCCTCTCT CATGTGTAC CTGCTACACT AGAATTATGA CCCCTAAGAG GGAAGAGACT
ATGTCAGTAT CATGATTCT NATTAACACC ATTATTTAGA ACCATGCTTG GCTTAAAGTA GTAGCTGCTC AGTAAATATT
TATCTATGIG TGAATTTTTA AGINCTTCCT TTATATTGAN TTAATAATTAG TCTCTGTGT GCAGCAGTCT GGGTTTGTCT
TATGTTGAAA TACTTATGTA GACTTCTACA TACATT

SEQ ID NO:713: (Length of Sequence = 354 Nucleotides)

AAACTTTACA ACCTGCACAT TTGTTATGCA TACTAAATGG TGTTTAAAA TTAGGGTTTC TTTGCCCTCTC TACACTACAC
TAATCTGCCT AAAGGTGGTT GTTTCATATT TATAATGCTA ATTATCATAC CTACCTACTT TAAATTTTAG GTAGAAAATT
ATCTGATTTA AATACAAACA TATTTTCTC ACATTGAGTA ATATGCATAA TGTAGTTCCA AATGTATTTT ATTACTATAG
TCACAATATC CAACTAAAA TTACGCTATC TAGAATTGTA CCANCCAAAA TCTCGTATTG GCAGATCTTG ACAGGCTGGA
CTGCAAGNA TGTGGCTTGG AATTTTAAAC CCAT

SEQ ID NO:714: (Length of Sequence = 349 Nucleotides)

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TGTAACCTCC ACCTACTAGT AACTGAAAAC ACGCATGTGG GAACATTGCA CAGATGGATA GATGCAGAGA TGAAAGAAGG
 AAAGCTAAAA TATTNCCAC GTGAAAACCA TGCACTCTGT TCAGAACTA ATTCTGCCCT CACGCCCTCC AGGAGCATGG
 GAGGGGTGTC GTCCGTGNCC TTTTGTGGAT GAGGGGGACC ACATGGTATT TCTACTGAAA GAGTTTTT

SEQ ID NO:702: (Length of Sequence = 397 Nucleotides)

CATCAAAAA AAAAGGAGCT AACTAGATGC TGTCAATAAG AGACTCACTT TAGATCTAGA GACACAGGTT CAATGTAAAG
 GGATGGAAAA ACATATTCCC TGTGGAAATC CCAATGAGGG TGCTATGGTT TTGCATGTGG TTTGTCCCCA CCAAACTCA
 TGTTTAAATT TAATTGCCAA TGTAAATGGT CTGGGAGCCT GGGCCTTAAG AGATAATTAA GATGGATTAA TGCTTTTCCC
 ATGAGACTGG GTTAGTGGAG ACTCTTGCAA AAGCATGTTG TCGTTAAGTG GGTCACTCTC CTTTGTCCCT TCTCTTTTAT
 ATACACTTCT TTCCCCTTCT ACTTTTCCAC CCTATTATGG AAGCACCGTG AAGCCCTCAC CAGATGCCAC CACCATG

SEQ ID NO:703: (Length of Sequence = 374 Nucleotides)

ATACAGGGTT AGACCAAGA GGAATTCAA TGAGGCCTGA TGGATTATG GACCAGAACA ACAGAGGGGT CTTGAAGGAA
 GGAAGATATA GAAAAGGCAA GGTGTGGTT AGAGAGGAAA TCCCAGAGTT TTAGCTCTGG GAGGTGTAAT AATTTCAAAA
 GAATAAGTCC AGGCCTGGCC ATGACATGGG AAGCTGAATC TCTGCAATGT TTTTCAAAT AGCATAATGG ATATCTTTGA
 CTCCTACCT GAAGCCAGAA AATATTAAAC TTGCATGTAT AATCATACAA ATGTATGCAT ACCTATTTAT ACATACATTT
 ACATATTTTA TACTTATGCT TTCATATATT CTACGTGAGG TACAATATAC TCCA

SEQ ID NO:704: (Length of Sequence = 422 Nucleotides)

GGCAATGACA TAGAGATGAT AAGAAACAAC ATGGTTTGGT AGAGGGAACA TTGATTTAG ACTCTGCCCA TTTTLAGCTG
 TATGACTTAC ATAAGTCATT TTGTGTCCAA GCTCATTTT CTCCCATATG AAAAGTGAAG GGGTTGGATT AAATGACTAA
 AATCCCCTTC CAGCCCTATG AGCCCAATGT ATTATGATCT CTGCTTTGTT TCCTTCTTAA GAGGCTTCCT ACTATAAAT
 GTGACCTATT TACATTTTAA GTTGAAGTAG CCCACAATA TGAATAATCA NTTTAGATTT TCCTCATCTC CTTTGGGAGA
 AATTAAATTC AAGCCTCTAT TCATTTGATG TTTTACAACA AGCTTCAAAG TTGGGCCATG GTTCATTCAC AGTTTTGATA
 TTTTGAGGAC ACCAATAAAA AG

SEQ ID NO:705: (Length of Sequence = 229 Nucleotides)

GCTGCGGNTC ATAACAGCTG GACTCACGCC GNTGACAGAG TCTTGATCAG TCCTCTGGGA ACTAGACGTC AGGCTCACAC
 CACTGCTGTC GCTGATCTGG GNCCTTTTCT CCTCTGTCTC ACCAAGGTCA AAGACAGGTT TGATTACTTC AGGCCTCTGT
 TTTTCCAAAG NTTTTGCTT TNNCACTTCC TGGTGCTTGT TCCACAATTC AATAGATGCT ATAAATTT

SEQ ID NO:706: (Length of Sequence = 255 Nucleotides)

GAGGACTGTA TACCTCAGTC CTCTCTCTAA ACTCCTCAGC CTCCCAACAG GGGCCTCCTC ACCTGGGTTT TGAGTGTGTA
 CCCCTTTTAG AGAGTGAGAT GCCACCCGGG CAGCACTCGT TAAAGCTGGC CAGCACGAGT GACTAAGGGG AGAGAGCATG
 ACATAGACCT GGGTGGCAAC GGGGACCTCT GGAAGCAGGT GGGAGTAACA NAGGAGAGGG CAGTNGAGGG TAGAGGAAAA
 GGACCTCCAG AGGTT

SEQ ID NO:707: (Length of Sequence = 324 Nucleotides)

CCGNGAGTGT GCCACTGCAC TCCACCTTGG TGACAGAGTG AGACTCGTC TCCAAAAACA AAAAAACAA AGTTGAACTA
 TAAACTGAAT TCCTCCCAAG GTTAGTTTCA CCTATGCCCT GGAATGAACA AGGACAGCTT GGAGGTTAGA AGCAAGATGG
 NGTCAGGCCA GATCTCTTTC ACTGTTAACA TTTTCTCAGT TATAATTTT GCAAATGTGG TTTTCTCCC TGCATCCATA

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CACTGTGACG GATGAGTGGG TATTTCTTTG TACCTGAGC TCTTTCATCC TACCTTGGTG GTCAAATGTG AGAGCAAGTG
 CTTTGGGGCT CAGAGGGCAT CACTCCAAGC ATTCTGCATG GAGTCTGTG TGGTGAATGT NCTTGCTGGC ATCTTGATCA
 AGGACTTTGT CATCATTAGC CATCAAATGC TTGTTGGTCC TTCTCAACCC TGTAAATGTTG ATACTTAAAA AACTGGAAAC
 ATCCTGACAG AAACAGTCGA GAAAGTGGTT GTGTGAGCTC TGGTTATCGC ATTACAGTTA AAGTTGGCAG ATAGGTTCTG
 TATTCAGTGC CCCATCAAAA ACAG

SEQ ID NO:696: (Length of Sequence = 324 Nucleotides)

CTTGAACGTG GCAGATAAGC ATTTTGATAT GCTGCTGGAT TCAGTTTGCC AGTATTTTAT TGAGCATTTC ACATCGATGT
 TCATCAGGGA TATTGGCCTG AAATTTTGTG GTTGTGTGTG TATCTCTGCT AGGTTTGGT ATCAGGATGA TGCTGGCCTC
 ATATAATGAC TTAGGGAGGA GTCCCTCTTT TNCTATGTG TTGAATAGTT TCAGAAGGAA TGTTACCAGC TCTTCTTTGT
 ACCTCTGGTA GAATTTGGCT GTGAATCCAA TAGACACAAT AAAAAAATGA TAAATGGGAT ATCACCCTG ACCTCAGAGG
 AAAT

SEQ ID NO:697: (Length of Sequence = 341 Nucleotides)

AATTAATCAA TCAGCCATTT TGGTGGCCGA AATTTATAAG GCAAGTAATA CTTTATGTTT CTTTGATAGA CACCATGATC
 AGAAACATAG TCTCTTTCTT AAAGGGAAAA TAGGAAGTCT TCTGAGTCAT AACAGATGCA TGCATAAAIT TCTCTGAGTC
 TTCATAAGAA ACACAAGCAA GATTTACAG AGGCAGTGA ATTTGAACTG AGTCTTGAGA AATAAGCAAT ATCTGAACAT
 GTAGAATGCA AAATAAGGA TAAGCAAGTG CTAATGCCA GAGGGTAAAT ACATATTAA TANCCANTAA CCAATTGCTA
 CTTGTGTTTC TTACACTAGA A

SEQ ID NO:698: (Length of Sequence = 317 Nucleotides)

GCAAACCAGG AGAAGCAGAA GAGCAGGGTA AACCTGGGT ATAATTGTC TAGACCCCA TGCTCCTTT AGTCTGAGTT
 CTGACATAAT TAAGTGTCTA TGAGATGTAC TGGGCCCTTC CTCATGCTT TTTGATGCCA CCTCACTAAT GTAAACAAAA
 CATTCATTTT TTCATCCTAT TTTTCTTAC AGCTGCTTAG CACAGTCTT ATGAAAAAAT GAAGCCTTGA AAATGGTATA
 TCCTCTGAC AAAGCTAAGC CTGACAAGTT GGCTGCATTA CCTAGGAATT AGAGAAGAGC AAGGGCAGAT GGTGGGG

SEQ ID NO:699: (Length of Sequence = 385 Nucleotides)

ACCAGGAGAT GGAGGTGCTC TAGACTGTGA TGCTGGGAAA GGAATGTGGG CTAGAAAAAG GGCTCCCTAG GGCCGGCATA
 TGGGCCACTG GGTGGAAGAG GGGCTCTGAG ACCCTCACCC TGGAGCAGGT CATCACCCAC ACCGAAGAAT GAAGCGTGAA
 TTCGGTCACG CTTAAATGT TGAATTGTTG GCAAAAGCCC AAGTTAATGA AATAGCATGG AAAATGGATG TGATGAGATT
 TTTGAATTGT AATTAGATTA ACATTGTAC TAGTTATCAG TCTGATATAT CTTATAAATC AAACGTTGGG TTGATTTATC
 TTTTATCACT TCTAGGNT TACTCCTAAC AGTAACTCAC AAACCCAGCC CCAAATCAGA GGCTT

SEQ ID NO:700: (Length of Sequence = 315 Nucleotides)

ATCAGTTGGA TTTGCAGAGG ATTGGAAGGC AGCACCAGGC AGGCTCAGAC TCACTGCTGA CAGGAATGGC TTTCTTTAGG
 ATGAAAGAGT TGTTTTTTGA GGACAGCAIT GATGATGCCA AGTACTGTGG GCGGCTCTAT GGCTTAGGCA CAGGAGTGGC
 CCANAAGCAG AATGAGGATG TGGACTCTNC CCANGAGAAG ATGAGCATCC TGGCGNTTAT CANCAACATG CAGCAGTGAT
 GGGGCCAGGC TCTCAGGNT GGGCCTGATC CCNCAITGGT GCTTACTNIG CTGACTGTGT ACTTATCTTC CCCAA

SEQ ID NO:701: (Length of Sequence = 387 Nucleotides)

GGCAGGAGAA TCGCTTGGG CCGGAGGCA GAGGTTGCAG TGAGCCAAGA TCGTGCCACT GCACTCCATC CTGGGCAACA
 GAGCGAGAGT CTGTCTCAA AATAAAAAAT AAAAAAATAA GGTAGGTCTT TTCATCATTG TGTTTTCTAG CATGTAGCAC

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SEQ ID NO:689: (Length of Sequence = 315 Nucleotides)

GATTTAAGTG TTAGCATTTC TAAACTTGAG ACTCTAACAG TAAAAATAAA GTAATCTGAA ACCTGTTTCC ATGGGTAAAA
CACTCTGCCT GGTATTCTTG TACACAAAAT TTAATAATA TGTGAATATC ATAAAATGAA AATATCACTC CCTTCAATTT
CTTGGCCCTT CACAAATTCA ATGTGACTAT GATCCTTTTC AATAATACIT TCAATGACAT TGTGCTTCTT TAGAAAAATC
ACTTAAGTTG TAGCATACAA TAGTTAACAT TAGTCCTTTT ATTGCTATGG TATATGCTAA TTTTTTTAAA AGGGG

SEQ ID NO:690: (Length of Sequence = 291 Nucleotides)

TTAAAATACT CCATATATTT NAGAAGCAAT TGAAAATGCA TCCATGTATG TNATTIGAGC GTTACTAGAA ATTTATTTAT
ACAAATCCAT ATTAATGTGC TAATAAGTGA CAAATATATA TATAGTCATG CACTGAATAA TGATGTTTTG GTCAACGATG
AACTGCACAT ACAATGGTGG CCCATAAGA TTAATAATAGA NCCAAATTT CCTATGGCCT AGTGATGCTG TAGCCATCAT
AATGTGGTAG TGCAACCCAT TACCTTTTCT ATGTTTAAAT ATACAAATAC T

SEQ ID NO:691: (Length of Sequence = 451 Nucleotides)

TTGAGCATCC GGAATATGGA GAAGTAATTC AGCTACAGGG TGACCAACGC AAGAACATAT GCCAGTNCCT CGTAGAGATT
GGACTGGCTA AGGACGATCA GCTGAAGGTT CATGGGTTTT AAGTGCTTGT GGCTCACTGA AGCTTAAGTG AGGATTTCTT
TGCAATGAGT AGAATTTCCC TTCTCTCCCT TGTACACAGT TTA AAAACCT CACAGCTTGT ATAATGTAC CATTGGGGT
CCGCTTTTAA CTGGACTAG TGTAACCTCT TCATGCAATA AACTGAAAAG AGCCATGCTG TCTAGTCTTG AAGTCCCTCA
TTTAAACAGA GGTCAAGCAA TAGGCGCTG GCAGTGTCAG GCCTGAAACC AAGCAATACC GTCATGTTTC AGCCAAGCCC
AGAGNCCTAA GGTTTACAAA CAACTATGG NCOGGAACCT CCTCAAGTTC T

SEQ ID NO:692: (Length of Sequence = 363 Nucleotides)

GATTTTNTGA TTATTGATAT TAGAAATGTT TAAAATTAAG ATATTAAACAT TTCATGAAGC TGAGTGGTGA GCACACCAGT
TTTATATTCT CTCTATATAA CTTTGTGTAT ATTGAAATG TTTTCTCATA AAAAGTATTT AAGCAAGTTT AGGAAAGAAT
ATTGATAAAT GAAATCTAGA GACCATCAAA AGCCAATTTT ACCATCACAA AGTATAATTG TGTTTCAAAT ATAATTGAAA
TTGTGTGACT GTTCATATT CTTTTTTTGT TTGTGTGTA TGAAGCATC TTAACAGTT GCCTTTCAA GCTGTTATCT
TTGATANTAA CATACATTAA CCTAACATTG TGGACTTCTG TTA

SEQ ID NO:693: (Length of Sequence = 269 Nucleotides)

TTAAGGGTCC CAAGACTGCT CTAACAACAA CACCCATTTT CATAAATATG GNTCAATAAA CACTTATTCA TTCTTTATAA
TTAGACTCTA TTGTAGAAT TGTTTTAGGT TTATAGAAAA ATTGAGCAGA TAGTACAGAA GATTGCCATA TACCCCTCAC
CCACAGAATT TCACAATTTA CCTGCGATT AAAGTCTAAT GTTAATATGA TATATTTAGT ACAAGTAGTG GGATTATATT
GATACATTAT TATTAATTAA AATCCNCAA

SEQ ID NO:694: (Length of Sequence = 330 Nucleotides)

GGCATAGTCA CTCCAGACA TGGTGCCTC TCCATGTGGA GTAGGTCAAA GTCTCOGTCC TCCTGGCCA GGTGGAAGCT
CCAGAGGGAC ATGTTTCAGC TTAGTACAAG GTGGCTGACA CTA CTCTCT GTAGGAAGAG GCTGGCTGGA GGTGAGGGCG
CCCCACTCAG CCTGTACCCA TCAAGAAGTA TTCAGAAAGG ATGTCTCTGG CATCCACAAG ACTACTGGGC GAACCACT
GCAAAAATGA AAACIAGCGT ACACAATTTA AATTGGTCTT AAACAAGCAA ATAATCCAGC CATTGGTGAC TCTGGGAATC
TAGAGTGCAA

SEQ ID NO:695: (Length of Sequence = 344 Nucleotides)

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CTGGTTCCCTT CTGGTCTGAA ATTAGAGTAG ACTCGTCTCTG AGTACTTGGC AAATGACTAT TTGATTCTCT GATTCCCTGG
NCTCCATGCT CACCAGATGC ATAGCAGGGA TCTCTCTAG NCACTCACAT CCAATTTTCA GG

SEQ ID NO:683: (Length of Sequence = 329 Nucleotides)

GATTTTAAAT AGTTAAACA TTTTTTAAA TCCATAAGTA ATTCTTACTC TACTCATTTA TACACACATA TACTCACATG
TACACAGACA TACCTACACA CACACTTATA AATACATGTA TACACAGAAT ATAGTAAGGT CTTTATCCC TTTTCAATGA
AATAAATATT GTATTCTATA TTTAGNATAA ATAATGTTGA AAAAGTGATT TTGGAGAAAG GTTGAAATGA TTGAGTCTTA
AGTGTGTCAA TGTATAATCT ACCCCTTCT AAACATCGTG TTTTAAGTAG TCATCTTACT TCAGAAATTA GAGGCTCAAT
GTGTTTAGG

SEQ ID NO:684: (Length of Sequence = 281 Nucleotides)

AACATGGCTG ANTTGAGATT ACACAGCCAT GATACATTGN CTGACAGCAC TTCACATTTT CCTGAGTTG GGGACAGAAA
TCACACTGCC CAAATACATT ATCTGATGGC TCCTCATGTT TCCCAAAGT TAGGAAAGGA GGTCTATAT ACATACATGC
ACAAGTGCAT ACACACACAC ACACATACAC ACACACACAG TGCTAGATGA GATGTTGANT GNCATAAGGA AATGAAAGTN
CCATCTCTCT NITNCTACC CCTGCATCT GTCCCTINAT A

SEQ ID NO:685: (Length of Sequence = 324 Nucleotides)

ATTTTTAATA ATTTTAACT AGCTACAAA TGTCAATCAC TTCACAACT GACAGAGGAG ACAGGAGGAA TTTAATATTA
CATGCTATAA TGATATTAT CTCACAGTTT ATATTTCATT CATTATATTT ATTTTITTA AAGGTTTCTT TATCAGCTAC
TAAACATCTC AGCAATTTGG TGTGCATAGC TCTAGATTAA GCAACAAAGN ATTGTACTGA TAACAAACCA CAGGGGAAAT
GGTGGTTAGT AAGAGTCAGC CTTATAAAT TTACATCCAC ACTGTTTCA CAGCAAGNT GCTCTCTCCA AAACGGTGGN
CATC

SEQ ID NO:686: (Length of Sequence = 380 Nucleotides)

CGAGGAGGAG GAGGAGAAA TTCCCCAGA TTGGGCGAGG CCGGCACCCC ACATTCCGTC CTGTTTGTAG AGGAGGAGGG
AAGAGAAATA AACGTGGCAG CGCATAGAAG GCCAGCAGGG AGACTGCTTT CCAGACACCT CCGGCCACA CAGCGTTCA
CCCCCGTTT TTTAGTCTT GGAAAAGSAA TTGGGCTCTG TTTTCTTTT GGGCTCTGTG CAACTNCAGC TACAGTGGAA
AAAAGCAAAC TGCTCTTGAT CCCAGGCCCT GCCTAAGCCT CAGCAGAACT TTAAGCCTA AACTTNAAGA GCCTCACCAG
GACGAGCAGG CATNCTTAA CCTTAAAGCA ATCCAGTTTC ACGGCTGGT TCAGTGAAT

SEQ ID NO:687: (Length of Sequence = 305 Nucleotides)

GACACTTCCC CTCTTTTATG GAAGCATAGT AAGATTTTTC CTTTATGGCG ATCATGATGG AGAAGTATAT GCTACAGGAG
GNGAGGTICA AATTGCAATG GAACCTCAGG CACTATATGA TGAAGTAAGA NCINTGCCAA TTGCAAAGCT GGATAGGACA
GTGCTGAGA AAGCTGTTAA AAAATATGTA GAAGATGAAA TGGCAAGGCT CCCTGATAGA TTGTCAGTAA CTTGGCCTGA
AGGAGATGAA TTATTGCCTA ATGAGATTAG GCCTGCTGGA ACCCCTATTG GTGCGTTAAG AATTG

SEQ ID NO:688: (Length of Sequence = 390 Nucleotides)

GAAGTCATAA GGCCTAAATA TTAATCCAST CTGTGACAAC GACAAGGTGA ATACAAGCCA GTCTCTACTT CTCTGGGCTT
CTGTTTCTG CACTTTTATAT AAAGATTGGG CAAGATGGTC TAACTTAAAT TTTATGATTC ACTAAGTTGA TTTTGTATGG
GGCAGATTTT NCITCGATGA AATATTAAACA AATAAGNCAC TCAAATAAAT CAGCAATGGG GTGCAGATGA GGACTACCGT
TTCTACAGCA AAATATGGGT GAACTCAGTA AGTGTAGGNA CACAGAAGTT AATGCTGACC TCTTGCATAG CATGTATGGG
ATATTAAATC ATTTCTGCTC TTCCATTTC GGGGTGAGGG AGGAACAGCT GTTCTGTAAC TCTTTTAAGG

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AAATATAATA TCAAAAATCA CTGCTGAGCT CTNCTGGCCT TCCATACTTA GCTCACCOCG GCACTTGAAA TTTCCACTTA
CTAATAACAA CTGCTCCTCA GGAAGGANGA GATTACTTTA GNAATCCTT GCAGGATGTT CCTGTCTATG GT

SEQ ID NO:677: (Length of Sequence = 333 Nucleotides)

CGCATGCTAA TTTAAAGATA TACAGGAAGN GAAAAGTAGG AGTTAAGTTG GATGTTGTTA GAAGTTGGAT GTTAGTATTA
CCTTCAGGAA CAGATCCCCA TGGCATGTCA CAGGCCTTAA TTATATACCT GGCTTTCTTA TTGTCTCCAC TTTATCATGA
GGACAAGGTC TTGGTTTCAT GGGAGGAACT TCTCCATTGA AATAAATGTC TGCCATGTCA GCACCGTTTG TNCCTCAGT
TTTAATATAA TGGACCATAT ATTAAACATN ATTAAACATA TTTTAAATN TGGTGTCACT AGGTAGATGC CCCAGNCATC
CTACTTCCCT CAC

SEQ ID NO:678: (Length of Sequence = 359 Nucleotides)

AAGGAGACAA AGAGTAGATA TGGTATCTTG GGGACAAATG GCACATGAAA GCAGATTGG TGCTTCTTTG GTAAATGGTT
TGATAACCAA TCCCTAGGAG ATAAAGTTAA TGTGCTTTT TTTTTTTTT TTAANCGAAG GTCCCTTACT GGTCTGCTT
CCATGAGTAG CCGTAGCCAG GGGAAAAGGG AGAGTTTTT TTTTTTTTT TTTGAGAAAG AGNCTCACTC TGTGCCCCAG
GNTGGAGINT AGTGGCATGA TCTGGGCTCA NTNCAGCCTC TGCTTCCCAG GTTCAAGCGA TTCTCNTGCC TTAGCCTNCC
GAGTNGCTGG AATTTCAGGC GCATGCACCA TGCTGGCT

SEQ ID NO:679: (Length of Sequence = 339 Nucleotides)

GGTGGCACAT GACTATAGTC CCAGCTACTT GGGAGGATGA GGTGAGAGGN TCCTTGAGC TGGGGAAGTA GAGGTTCAG
TGAGCTGAGA TCTCACTACT GTACTCCAGC CTGGATGACA GAGTGAAACC CTGTCTCAA AATAAATAAA GANAGAAAGA
NTATAAATAT TTTGTATCAA TTTTCAGCTT TTACAGTCAA TGAACCTAAG TCTTAATTTT GGTACAGAA TTAAATATTA
ATATTAACAA TCAAGGCAAT GTAAAAGTAA AGTACAGTTG ACTGAAGCTG GGACACAGAC GGNAAAGAGA GTGAATGAA
AGAAGGATAC TAATATTCT

SEQ ID NO:680: (Length of Sequence = 356 Nucleotides)

CTGTATAATC AGGTATATCA CAAAGTCTAT AGTCTCTGAG ACATGGGTGA GTAGGTGTGA GCACCTGGTG AAACAGGTCA
GAGGAAAAGC AAGTTGGCGT TGGAGTCAGC TGTCAAGAGA TAGATCCGTG ATGGTATCGA GATCACTACA GACAGGTGGT
GGTCACCTAG TGTGTGCGC TGAAATTTGG AGGGTTTAA TTTTAATCCA AATACCATAG AAATGGATAT GAAAAGATGG
GTGACACATG CTGCACGTTG GGAAGTGGGG ATGACCAGGT GCTTAGTTGC ATGGGAGAGG CCACAAGTGC TTGGCAATGT
TTTGTGNGAC TTAGCCTCTC ATCTCAGGAA TTAGCT

SEQ ID NO:681: (Length of Sequence = 345 Nucleotides)

GGCCTGGTGT TTGGCTGAGG TGCCTAGGA CCCCTGGCAG TGGTGTACTG GATGGCATCA GTTCTGATGG GTCANATGTC
CATCTAACA GGTGGTGCT GGAGAGGGAG CAGTTGTAA ATATCTTTAC TATCTCCCCT NCTCCGGACA CCTAGATGCC
CAAATATACA GCACGTAGTA TCGAGGCAGG CCTTTTIGAT TGACATCAGA ATCAGGTTTG CAATGGAATA GGAGCTTTCC
TTCTCTCTGT CACTTAGCC CCAGGCTCCA CCTCANAGTC TGGAAATGCTC ATACCTATGG CAGGTGACCT TGTGTACAG
NTGGGGTTA ATGCCATTCT GTCCT

SEQ ID NO:682: (Length of Sequence = 302 Nucleotides)

CTCAGACATA TCTTTTTTTC TCCTAGCATG ATGCCACCC CAAGGTACTT ACACGTCTTC AACACACCT TCCGACAGC
TTGCTGGTAT CTGTGTGGC TATTCTGGTG CACGGAATAA TTCCCATCTT TTGAGATAAT GGGGGGAGC CTAGTAGGCT

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SEQ ID NO:670: (Length of Sequence = 234 Nucleotides)

AATAAGTTG GGATATTGA TTGTTTCCTT TTCTGATCTT TATGCTGACT GCAGTATCAG ATACCATTTC ATTGTTTAAA
AATCTTCCTT TTTTTTTTTT TTTTTTTTGG CATTITGCTC TTTTGTGATT GTTCAAAGT CAAGTTGATG GCCNCAAAT
TCCAGAGGCT AAGCAATGCA GAAGTTTCAT CTACTGGCAG CTAGTTTTAT TTCTTAAAAA TACATTAAAT TAGG

SEQ ID NO:671: (Length of Sequence = 252 Nucleotides)

CCTGAAATGT AAATTGTTTT TAATATATTT AAGAGCACAC AGAAGTCTTG ATTTATAAAA AAATAAATAT ATAACATGAC
AAATTTACTG ATGATCCTGG GGCTCTGAGG TCAAACCTCT TAAATGATCA GTGAAAACAT AAAACATCCA TGATCTGTTA
ACACACACAG GGGCATATTC CAGTTGTAAA AAACAANITC CTGAAGGCT CAGNACGTAC AAAANTCAGT NTTINTGGCA
GAAAGCACAT CC

SEQ ID NO:672: (Length of Sequence = 366 Nucleotides)

CCATCCAACCT ACTTACTCAA TCCTCTTGAA ATCTGCCCTT TGTAAATGTAA CTGATAGGCC AGCGTTTTCT TTCACTGTGG
GAAATAAAGG CTACTTGGTT GCCTTAGGGA GGGCAACAAT GTCAGCTGCA TAAGCAGCAA GAATATTATA TTTNATTACT
AGTCCACCCT TAATAAGAG AGAAACCTTA GGAAATGGAA AGAGGTGTCT GTTTTATATT TCCTTTGCTT TTCAACCATT
GTTTACACAC TCTCCCTCT AGTGCTTGA GAACCTTCAT GGAAACTCTG TTCAGGTTCT TGACTCTCAG CGACANATGT
GGAGGTCTTT GTGGTCTTAG CTCTCTAGGC CTGAGAATCA CATACA

SEQ ID NO:673: (Length of Sequence = 349 Nucleotides)

CCTCCCATCT TGGCCTCCA AAGTGTAGG ATTACAGGCG TGAGCANCCA CACCCTGCCT GGTTGTGTAC TCTTTTAAAT
ACTAAGTTTT TAATGTTAAA TGCTGCTTTT AGATACACTG TAAAAATACA CCTATCAATG AGTTTTTTTA TTAATAACAT
TGCAATTGTA CTAGNCTTTA AATACTAAGC AATAATTCAG GCTTCAATGT TGGTTTATAG TTTTCTCATT TCTTTCATTT
AATACCTCTG TAAAATGAAG CAGTTACTTC CATTTTCTCG AGGTGAGATA AGTGCCCTGC ACAAATGTTA TAGGNCCAGT
AAGTGAGGAC TGGAGCTCTG GATCCTAAT

SEQ ID NO:674: (Length of Sequence = 256 Nucleotides)

GCACCTTGGG AGGCCGAGGC AGTTGGNTCA CCTGAGGTTA GGAGTTTGAG ACCAGCCTGG CCAACAGGGT GAAACCGTIN
TTGCTCTAAA AATACAAAAN TTAGCCGGGC GTGGTGTGTC ATGCTGTAG TCCAGGTAC TCAGGNGGCT GAGGCAGGAG
AATCACTTGA ACCCGAGGTG GGGCAGGNGG AGGTTGCAGT AAGCCAAGAT CGCGCCATTG CACTCTAGCC TAGGTGACAG
AGTGAGACTC CATCTC

SEQ ID NO:675: (Length of Sequence = 292 Nucleotides)

GAAGTCATTT TAGACTCTCA ATTTTAAATT AATTTTGAAT CACTAATATT TTCACAGTTT ATTAATATAT TTANTCCTA
TTTAAATTIN AGATTATTTT TATTACCATG TACTGAATTT TTACATCCTG NTACCCCTTC CTCTCCATG TCAGTATCAT
GTTCTCTAAT TATCTTGCCA AATTTTGAAA CTACACACAA AAAGCATACT TGCATTATTT ATAATANANT NGCATTCAST
GGCTTTTAA AAAANTGTTT GATTCAAAAC TTAAACATAC TGATAAGTAA GA

SEQ ID NO:676: (Length of Sequence = 392 Nucleotides)

ATCAAAGATT GCAAACATTT ATTTTGATCC TGGACTACAG TGTGGGGATC ATTGCTATGT TGGCTTGCCT TTNCTATCCA
AATCTGAACC CAAAGTGCGC CTGCTGTAG CCATGCAGGA AGATATGTGG GATGCTGACT GGGATTTGCA TCAAAGCCTG
TTCAAGGGAT GGACAGGAAT AAAGGAAAAT NCAGGTCATA GATTGAGTGC TATATTTGAN GTAAATACAG ACCTTCAAAA

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SEQ ID NO:663: (Length of Sequence = 325 Nucleotides)

CACAACAATT CTATGAAATT AGCTGGGGAG ATACTGTCTT TATTTTTCAC AGCTGAAGAA ACCAAAGCTT TGGGAAGTTT
 GTGACTTCTC TGAGATCACA GCTGGTGATA GAAGGAGCTG GGACACGGC TTGGGTTGAC TGGCTTCTGG TTTTGGTTCT
 CTGGCTTCTA GTGCTGGAAG AAGCCCTCTC TTTCCCTTCT CTTTCTCAG TAGCATCTGA CTCCTTTTCAT AAGCAAACAG
 CTGTATAAAC AAAGCCCCA TTTTGGTCAA GCACAGGGTG AATGTGATAT TTGTTCCAC AACCTTATTC TNCACCAAC
 AGCCG

SEQ ID NO:664: (Length of Sequence = 300 Nucleotides)

TTGCTGAGAG AGATGATGTT TCATGGGTGA TGCTCTGGA AGAGATTGGA TAGGACCCAA GCACAGAGCA AGAAATTGGC
 TTTAGGCAAG TCAGATTGT CTATACTAG TTAGGAGTAA AGAGAAATGG ATGATACAGA TGCAGCTATG TTCTAGGAG
 GGAAGTGGAG GGAATTCTG TGATGAGCT TTAGTAATGT AGGCAGCAAG GTCAACTACT GACAGTGAGA GGAGAAATTC
 GGGGAGGCTG GTCACAGTTT GAAGTAATAG GTATGGGGA GGCAGATGTT TGTTGGTGA

SEQ ID NO:665: (Length of Sequence = 327 Nucleotides)

CAATAAGAA CCCAGAGAGA GGGAGAGATT CACAGACAAT AGCTTAAAAA GTCTAGAAAT TATAGACCGA TTGAGGTCAG
 CAAGAAACAA ATTATTCAT ATATCCCCG AGGCTAGAG CCAGACTTTC CCTATGATT CCAAAATTAC TTGCGAGTTT
 CATTAGGGTG AAAGGCAAGT CAGTCTCATG AGTTCAGAAA GTAAAGGTTG TTCTTAAAA TTTAGATAGA CTTGACAACC
 ACTTAGGATG GCATTTTGGC ATTCTGTCCC TGCTCATCAA AGAAGTTGCT CAAATTTGTG GGNTAGAGGA ATGAGGAGCA
 AGAAGTA

SEQ ID NO:666: (Length of Sequence = 319 Nucleotides)

ATTCCCAAGG AGAGGCTGAG ACAGAGAGGC TTGAGCTGT TCCTCAGCCC CCTACCTTAA CTCCCTCCCT ACTGTTGATC
 AGGCTGGTCT CTAACCTCG ACCTCAGTG ATATGTGTG CTCAGCTCC CAAAGTCTG GGATTACAGG TGTGAGCCAC
 CATGCCGCG CTGGGTTTA TCTTAAGTTC TTTGTGTG TGTTCCATCT GCATGAATAC ATTTCCTTCA TTTACTTACG
 TCTTAGCTTA AATGATACCT CCTTCTTCTT CTTACTGCCA TTATCTTCCC TTGTCACTCC ATACTCAGAT TTCATTGCA

SEQ ID NO:667: (Length of Sequence = 288 Nucleotides)

GGTGGCAGGC TGCTTGCAAT NCAAGCCAG GNGTTTCTG ATGGGTGAGG GTGGGGAGGC TGCACACCAC ACAAGGTCAC
 CCTACTCTAC CTTCTACCCA CCTACCACA GCGCTGAGCT CACCACTCCC CCAGGGCATG GGACTCTTGA TAATTCCAG
 TCCATGAAAC CCTACAATA TTGCAGTGG TATGANTCCT TCTATGAAAG TACTTCCCT GAGTGTGCCA GCGCTCAGTT
 TGAAGGTCCT TTAAGTCTC CCCCAATTAA CTATAATGGG GATATTTT

SEQ ID NO:668: (Length of Sequence = 212 Nucleotides)

TCNTTCTINT TTCTTATCTA TCNCTTCAC CATGTGCTT CGGGGCTGG AACATAGTAG ATGCTCAATA AATATTGATT
 GAATGAATGA ATGAATAAAT CTNCTTACAC CTCTCATGCT TCAAACAGG AAAGGCTAGA TTATTAGAA GTCTTGTCGG
 GGATAATAAT NAGCTCAGTG GAAGCCCTCT AGTTCTCACT CGAGTTTCTC CC

SEQ ID NO:669: (Length of Sequence = 281 Nucleotides)

ATCTTTTCAA CCTATCAAT AAGATGTTAT GAAAGATTGG TTCTCTGTG TACAAGTAGT ATAGAATCTT TTTGATCTT
 TGACTCTGTG CIGCCTATCT CATCAATGTT GTTGCTATTA ATATCTGTC TTTAACACTG GATGTTGGGA TCTTAGTAAT
 GTTGCTGATA ATAGGATTT CAGCAAACT TCCATATCCC TTGAAGATAT GGTAGTTTAT ATTACTATAT CGATAACAGT
 TTTGCCCTGTG GAGATTGAC TAGTTTTAGG TGTTTGAAG C

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COGAGATCGC TCCACTGCAC TCCAGTCTGG GTGACAGAGT GAGACCTTGT CTCCAAAATA AAAGAAATTT ACTGCAAAGG
GATGTTGCAT TTCAGGTGAA TGTATGTAGC CTTTCAGAGG CCGGGCTATT TATTAGATGT ATTTTATAAC TGAGGGTTCT
AGGTAAACAC AAGCCAAACA GATCCACCAG AAGCCTAGAG CTGTGGACTC TT

SEQ ID NO:657: (Length of Sequence = 334 Nucleotides)

GGTGTGGAA AAAAAAOCCT CCAGATAAGA TTGTGCTGTC TTCAATTTCT TGTGAGGCTG CCCAGACAAA GGTACTTTTC
CTGATTGGGG ATCTATGTC ACCTGATCA GATACTGAGC TTGGAAGTCA GGCAGTGGTG GATCAGATTA CCAGACATCA
CACCAACCA TTGAAGGAAG AAAGAGGGGC TATTGATCAG CATCAAGAAA CTAAACAAAC AACCAAGGAC CAATCTGGAG
AGTCTGATAC ACAGAAATG GTTTCTGAAG AGCCCTGTGA ACTTCCCTGT TGGAAATCATT CAGACCCAGA AAGCATGAGC
TTATTCGACG GATA

SEQ ID NO:658: (Length of Sequence = 286 Nucleotides)

ACAAACCAAC TCATTTCTT TCTGGATATT GTTGAACAAA AATAGCATTC AGTTTACCCN CTAGTGCTAA CAGAAGNENC
TCAAGCTGTT CCCCCATCAT GGGNGCAGCC CTAAACAGAG GGCTGCACAA ATCTGCAGTG CTGCTCTGGG GAAGGCTNCA
AAGCACTTTT TTCCCAAGAA GGGATGCTGT TCANGTCTGT TAGGGGAAGC ACACCNCIN TGCCTGGGCA CAGATGAACT
GCCCTTCAAG GCAATCATCA TCTTTTCT AATAGGGAAG GTTTGG

SEQ ID NO:659: (Length of Sequence = 321 Nucleotides)

GGTCTTTATA TGTTCOGAG ACAGGACTGA AACTCCCTGC CTCAAGTCA TTTTCTAAG TAGCTGGGAC TATAGGCTGT
TTCCTTTTTT AAAGGAAGGA TTTTATGTTT ATCATGAAGG AAAATAA ATTTGGCTAA CTAAAGAGT TATTTATCAG
GAGACACTAT TAAAAAAGG CAAATCAGAA ATTTGGAGAA ATTTTITA ATACTGATAA TAAGACAGAA TTGTACCTGT
TAACCATAAA TATGTAGAAT TTCTACCATA TCAATAAGGT AATAGTTTCT GTTGCTCCAC ATCCTCTGAC ACGGTGGGT
A

SEQ ID NO:660: (Length of Sequence = 302 Nucleotides)

TTTGTTAAGG ACATAATGTT TTTGACTGGG GATCATGTTT GGCTGATGTA AATATTAAATG CCAAAATAGG AGCTAGGATG
AAAGTAACAC TGTAAATAGT AGTAGAATTT ATTTCATATT AAAATGTGTC ATGACGTAAT TTTTATGGCT TGGCTCAAGC
AACAATTTTC AGAGTGCACC CTCATTGATG CTAATCAGAG AGAGTGGAT GTGCTGTTAC TGCTTTCTAA CTCTGCCATC
TACGTGGCCT ATTTATGATG TGAAGTTGAT AAAGTAAACC AGTATCAACG NCTAAGTCTA GG

SEQ ID NO:661: (Length of Sequence = 249 Nucleotides)

AAAAAATAA ACTCTCAAGG GTCTAACTTT ACCCATCATA AAATAATTTT GGTCGAAGGG TAGTGGCACA TTTTATTTAT
TTGGGATACC ATGCAGATGC AACCTAGCCC CATTCTTTAT GCAAAGTAGA TTATCCGTGC ATTTCTTCTG CATTGATAGT
GAATCCTTAC TGGGNCACAC TCATTCCATT TGGCAACAAT CTTAATGNN CAGGCAATAT ATAACATGTC TGAAGTCTCT
TAGCACTAA

SEQ ID NO:662: (Length of Sequence = 340 Nucleotides)

TTTTTTTTTG GCAGCCTTGT AAGGAGAACT TCACCATTC CCAGCACATC CCTATGTGTG CGCCTATTTT AATGCACCTC
TCTGAAACAG AGACCTTTTT GTTCACAACC ATAACTAAAG CTGGAAAGTC AGTCTTCAGG CAAGGCGAGG GAGGAAAACA
TCCCATTAGA ATTTTTTCAG GAAAGACTTA TGGNAAAAA TATCTCTCTC CCACCTCCTT TTATCCCAT GAGACACAGT
TTCCCACTGT AATCAGGGTA ATATGCAATT NTAGTNCCTG ATATGTGATA CATTATGTG ATGGCAAAGA TAAGTCTGTC
TTGCATGCAG GGTACTAGAG

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SEQ ID NO:650: (Length of Sequence = 286 Nucleotides)

GGGTGAAAG GAAAGGTGAC AGGAAAGATG TGTITAGCAT CCATGAGCAG CTGGGGAGAG TCTTTCCTGT CTCGTAAACG
 CATCTGAGAA GATTAGGAAA AAAAATAAAC AGAGCATCAG TTCTTTGAAT CTAAAAGACT TTNTCTACT AAAATTTCTA
 CCTCAAAAT CTCACATAAT GAAGANIGIT TACTTTTGIT TTAACTCAC TTCATTTTCC CAATTAACATA TTATCAAAAA
 AGTTAGTGCA TTGTAAAATA AGNTAATAAA GNTAACACA TTATCC

SEQ ID NO:651: (Length of Sequence = 360 Nucleotides)

GATAATGTAA ATTTTGTCTT CTGGGCTGT CATCAGGATT GCAATTTTNA GATTAGTIT GCTAATIGIT TGGCCTTTGA
 AAAATTATAT ACACTTGGIT TGTTTGGIT TTCTTATGTC AAAACAAGGA AATAAAATCA CATTGTCTTT CCAAGAAAAG
 ATATGTTTA AGTGGTGTIT TAGTGTTTIG TGCTTTGGG GGTTGGAGGG GGTTGTGGA ATACACAAAC ACACACACAC
 AAACACACAC AGTCTATATA TAANTTATTT GGAGCCATCA CTATATTTTA AGGAAAATGN AAATAATCTA TTGAAGCTTT
 AAAATTAGGA ATTTTGTATT TAAGCTAAGG AGCCTATTTT

SEQ ID NO:652: (Length of Sequence = 353 Nucleotides)

GTGGTGGGNN CCTGTATCC CAGCTACTTG GGAGGCTGAG GCAGGAGAAT CGCTTGANCC CTGGAGGCAG AGGTTGCAGT
 GAGCCGAGAT OGAACCACTG CACTCCAGCC TAGGTGACAA GAGCGAACT TTGCGGCAT TTACTCTTC AAAAGATTIA
 ACGCAATTAC AATCAAAAA CACTTGTCAT ATATAACACT TTTTCACATG GAAATAAAT GGTGGTTTAA GGTITACAAT
 TCCTTTGAAT AAAATTTTCA TTATTAGTIA CAAAATGCTA AGACAGATTG AGGTCTCAA GAAAGANCTT TGAGGAAAAT
 TTATGGTTT AAAGGGACTT TCACCAATA TGA

SEQ ID NO:653: (Length of Sequence = 224 Nucleotides)

AAGACAGGA NTACTTTAT CAAAACCAT CACAGAAATG GACAGCTTGG GTCTGTAAAC AAGCATTCAT GTTTAGNGC
 ATAGGTAGT AATGTATAT GAGAGCATAC ACTGCTACAT ACAATTAAC TGTTCAGACC ACACTTTTC AATGTTTAAA
 ACAGNATAAG CTCCCTGTAA AAGCAGCAC CTTTGTGAC GNTTAACTT TAGTATTCCT CTCC

SEQ ID NO:654: (Length of Sequence = 353 Nucleotides)

GTCAACTCTA TTTTCCATAT GAATTATTAG AITTTGGTGT GTCTGTGAA GTAACCTGAT ACGATAGATG TGTAGTATGA
 ATTTGTCCA CATGGTTTGG CCTTGGCAG AACTGCAGT ACCTGAAATG GTTCCCTAAT TTTTCTTAG TATTACTATC
 CAACACTTCC TCTCATAATC ACTAGTGTAT TGTATAATG TTAAGTGTCC TTTATTCATA TATTAAAT AAAAGAATAC
 TCTGGTAGGA TTTTGGAGGC CAATAGTGT TTTCCACTGT TTGAGGTATT AGGAGGGCTA TTTACTGATA CTTGTAGTGC
 CTTCCCATTC TGGTTTATCA TGCACCTCTA AAT

SEQ ID NO:655: (Length of Sequence = 365 Nucleotides)

GAAACTINACT TCACATTTCT CCAGGGAGGG ATGCTTTTGA AAAACTGCTC AGTGAGATGA AGCACAGATC TGCTTTTINAT
 CCCTTTGTGA CCTTTTAAA GACATAAGGT ATGTTTGTAC ACTGGAGTAT ATATGAGGGT TGCTAACGTT TAGGTTGAAA
 GAGCTGCTGT TGCCACAGC TTATTTATTT NCCACCAATT TTGTCTCCT GGTCTCATCC AGTTACATTT CCTGGGATAT
 GTTTTGGAG GTTGTCTAGA TCAGGCACT AGAGTCCCTT TGGGTTCTC CTCCCTCTC TGCTATTITG GCCTCGCCCT
 TGACAAACAT TCCCAACATT CACAACCAGG CCTTTGGCTA AATGT

SEQ ID NO:656: (Length of Sequence = 372 Nucleotides)

GTCAATGATC TGAGACCAGC CTGGCCATCA TGGCAAAACC CTATCTCTAC TAAAAATACA AAAGTTAGCT GGGTGTGGTG
 GGTGACCT GCATTTCTAG CCACTTGGGA TGCTGAGGCA GAAGAATCG TTAACCTGG GAGGCAGAGG TTGCAGTGAG

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GGTATCTTAA AGCCTTTTCAG GGATTTCAT AGACACATTT CTTTAGCTGA AATCTATTCT CTCAGAAACT TACCCAACT
 TCTTAATAAT GINCAAATC TAAGAAAGAT ATCATGGCTA CACAGCACCA GGNAGAGCAC ATTATTTCTC TTCACAATTC
 CCTTGCCATAG CATCATGGCT TCCTAAGGGC TTTTAAGTTT ATTGCTTCAA CTGATTCTCA TAAAATCTCT GAGATGCTAT
 CTGGAAGTA TTATTATCCC CAGTTTGCAG ATAAGGCAAC TGAGGTCTAG ACTTGCTAAA AAATCACACA ACCAGGTAAG
 TGGGC

SEQ ID NO:644: (Length of Sequence = 373 Nucleotides)

CTTCACATCA GCAGCCGGAC GAGGTGACTG AAAATCCAAA ACAGAAAATT GCAGCAGAAA GCAGTGAAAA TGTGATTGT
 CCAGAGAATC CTAAAATGAA GTTGATGGA AAACITGACC AAGAAGGCAA TGATGTAAAA ACAGCAGCTG AGGAGGTACT
 AGCTGGTAGA GACACATTAG ATTTTGAGGA TGTACAGTT CAATCATCAG GCCGAGGGC TGGTGGTGAA GAATTAGATG
 AAGGTGTTGC AAAAGATAAT GCTAAAATAG ATGGTGCCAC TTAAAGCAA TCCTNGAAGG ANCCAGAGGA GCGAAGGATG
 CAGATCACTG CACCCGTACC CCAAAAATTG GAAAGTCCCC TCACAGGCCA TTT

SEQ ID NO:645: (Length of Sequence = 310 Nucleotides)

TTTTTTTTT AAGACTCAAG GTAATGAAAA CTATGAGTAG AATAGTAAGG TGTGACAGGG GACAAATAAG TAGATATAAA
 ACTATGCTGC AATATTTTAG TTATTAAGC TGGGAAATAT GCAAAATGTA GTAGTGCTTG GAACCAGAGA AGGTCTATA
 TTTAGCTGT CTTCTGTAGC TAAATCTGAC AAATGAAAA ATATCATATT CTCGTCTCA GGTACATTTT ATGTATATTT
 TGACAGCATA TCAATATAT GANACATTAG GTTAAATAAA TTAATCCA GTGGGATAAA CTATATGGGG

SEQ ID NO:646: (Length of Sequence = 362 Nucleotides)

CTTGGGATTG CTAGATCAGT GTTTAGACA GGAATGCCAA GGCAGAAAAG AATCACATAT CCAGGACCAC ATAAAANCTG
 GAGTGTATGT CATAACAAAT TTNCCTGT GCTTAGAAGT TTTATGGCTT TGGATTTTAC ATTGATGTTT GCAGTCCATT
 TTGAGTACT TTTGTATCT GATATGAAAT ATACCCAAGT NCATTTAAAA AATAAGATTA TACAGTTGTT TATGGAATGC
 ATTTATGTAC ACGGGTAATC TGTTTGATT TTGTGTAT GTTAAACAT CTTTATTATA GTATTNGTA AGAGTAGGTT
 AATATTGACC TTGGGCATTT TTAAACCAAG GGGGGAATTT CC

SEQ ID NO:647: (Length of Sequence = 226 Nucleotides)

TTTGGGCTC AGATCTGTAA GTTTATTTGC TCAATGTACG ACAGCTACAT AATGCTTAC ATTATGATA TTCCATCACT
 GAGGAACTG CTAAAGATGG TCCGTGTGTG AAATAATTCC TTAGAGAAAC ACGGAGCTGG AAAAATAATC ACTGATTAGA
 CCTTAAAAAT AGTTCAGTGC ATAACATGNC AAAAAGCACA AAGGCTCATT CAGAGAACAT ATTTGT

SEQ ID NO:648: (Length of Sequence = 198 Nucleotides)

AACTAAAAAG TTAACATTT TACAAAACAA CAAGTTTTC TTAATTATG ATTTGTTATT ATAAAANCTA GTAAGAAAA
 ATTCCACCAC ATGAAAGCAT TTNCTAAAAT TCATACCCCC GTACCTATTT TTAANTACAG TTGGTAAATT GATTAAGCTC
 TATTINCAIT TTGANTGATC ATCGGTTTTA TTTATTT

SEQ ID NO:649: (Length of Sequence = 337 Nucleotides)

ACATCTGCAG CCATATATGA GGTCCCTCAT GAGACTTACG AACAGGTGT GTTTAATGT GACAGTGTGT CTGATGTGTC
 CCCAGCACAT TGGGACCACT ACACAGTGT ATTGTACAT CTGCTGAGTA ACATTGAGTG TGTGGGTAAAC TAAAGCCCTC
 AGTAATTATT TTACTTAATG TTTTCAAGCT TAATCTGAT CTGTACTTG CATGATTTAT TATTCCTTGT GCTAAATCT
 TCAATGTTCT TGCCITGATT GATCTGTCAT TATCTATCAC TTAATAAAA TANTAAATNC CTTAATTAA GTCATGGTTA
 AATGAGGGAC TTTGTTT

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TTCATAAAAA TTTTACTTAA AATCTGTAAAC GCTAGATATT GACTATCCTT AGTTGAGTCA CTGAGGTTTA AACACAATGG
 TAAGTCTTAA AGTCTGCTAT TTACAGAGCA TTGAATCTGT ACCAATTTGC AATAGAAAGC CTTCAGTATG CAAGAAGTTT
 GCATGGGTAT TAAGAACACA GCTTAAATAA GGCATTTGAT CTAATCTGCA GGAAGAATTT TCTTCCCCAA AACAGAATTA
 TAAAAGCTTA CTTTAAACAG GAGGCAGAAT AATTCTTTTA GGAAACCATT TCATTCTGTT TCTACTAACC TATACCATCT
 GAGGAATTCT AGGGAGGATA ATAAAANTCT CGTGTATTCC ACAGCAAAC TACATACCTT AAAG

SEQ ID NO:638: (Length of Sequence = 409 Nucleotides)

GAAATTTTTC ATCAGCTCTT GTTCTCTCTC ATTCTTTTGG ACCTTGTAGA TTTATCCTTT TTTCTTAATT TATTCTCACT
 TAATGGGATT TCAGGAGCAT ATTGACTAAG TTTTCATTTT TACATGTATA CTGGGGAGTA TGACATAGAC ATCTCTGTAC
 TTAGATATTA CTGATGTAAAG TCTACTTTGA ATCAAATGAA CAGATGTTTA AAAAGTATTTG TNCOCATTTG TTTTAATGAT
 TTCCTCTGT GAGTTGGGGT GGTGCTGCC ATCACCACCT CAGGACGGGT ATTTGAAAAT ACCTGGGNNAA AATTGTAAAC
 ATGTCCTGGA AAACACTGCA GGATATTTTA ATTGGGCAGA GGGGTCAAGG GGATGGATTA ACCATTGCGG AAATGTGAGG
 GACGGGTCC

SEQ ID NO:639: (Length of Sequence = 197 Nucleotides)

GGTCTACTC ACGGCTCAAG AGCATGGCTC AGGAGGAGAT CCGCAGAGAG ATGGACAAGA TNATCGAGGA CCTGGAGCTC
 TCCAACAAAC GGCACACT GGTGCAGACA TTGTGGGGTG GCATGAAGCG CAAGTGATACC GTGGCCATCG CCTGTGTGGG
 CGGCTCTCGC GCCATCATCC TGGACGAGCC CACGGCG

SEQ ID NO:640: (Length of Sequence = 398 Nucleotides)

GAGAAGGAGT TTGCTCTTG TCACCCAGGC TGGAGTGCAA TGGTGGGGC TGGCTCACT GCAACCTCTG CTTCCCCCGG
 GTTCAAGGGA TTCTCTGCC TCAGCCTCTT GAGGAGCTGG GATTACAGGC ACCCGCCACA CACCCAGCTA ATTTCTATT
 TCCAGTAGAG ATGGGGTTTC ACCATGTTGG CCAGGCTGGT TTTGAAGTCC TGACCTCAGT TGATCTGCCT GCCTGGCCT
 CCCAAAGTGC TGGGATTACA GGGGTGAGCC ATTGGCACAC AGCCTTATCT GCATTTTCAA ACGGGCCAGT ATGGATGGGT
 TTTACTTTA TACTINGAAG GTCATCCTTT TNAAAAANG AACCTTTAAA ACCATTAACT ATATATAAAA ACTATATT

SEQ ID NO:641: (Length of Sequence = 402 Nucleotides)

ATAATTTTNA GCAAAATGAT ACAAACACTNT NTTAACCAAG TAGAAGATTG GTAGTTACAG TGGAAATGTC AGGGAGTACA
 GGGGGGCCAC CACTGGAGGG AGCTGAGGCC CTGGAAAAGG AGTCTGATTC TTTGCAATTC TCTCTCTGCT TTINTTCCA
 GCCCCGTAC AACCGAGTTC ACGTGGGGGG CCGCAGTGCA GCCCCAGCG TGGCAGCTCT TGGAGTCTGT CCGTTTATTA
 TGTTTCCCCC ACGAGGCTG CTGGGTGAGT GGCCTGGAGA GCTCCCGGTG TTAACATTC GATCCTAGAC CGGGGGGACG
 TGTCTACTAGG TAAAGGCCAT TGGGTAAACCA GAGTAGATCA GGCCATGGCA TTTGTCTGGC CCTTTTACA GCAATTAAGG
 GG

SEQ ID NO:642: (Length of Sequence = 395 Nucleotides)

CTTCAATGAT GCAATTGAT TAGCTGTGTC TTACAAACAG AACTCCCAGG ACTTCATGGA TGAGATTTTT CAGGAGCTCG
 AGAAGTTTCA CTTGGAGCAG GAAGAGGAGG ACGTGCCAGA CCAGGAACAG AGCAGCAGCA TCGAGACCCC ATCAGAGGAG
 GCGGCTCTC CCCACAGCTG AGGGGCTGGG GCTAGGGGTG GGTGGAGCCC TTTTAAATA CCTTCCCTT CAACAACCTCT
 CCAGCTCTGA ATGGAGAAAC TCTCTAGGNC ATCCCTCTT CTACCTCTG CAACCCACCC ATCCTATTAG GCTNCCACAT
 TCTAGGGGCC GTGATACAGG GGATGAGGGT CAGCAACCAG CAAAACCTN GGAAGTGTG GGAAGAATTT TCCCC

SEQ ID NO:643: (Length of Sequence = 325 Nucleotides)

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TCATTACATC AAAACACAC CTGCACACAT ATNTTTATTG CAACACAATT CACAATTGTA AAGATATGGA ACCAACCTAA
GTGCCCATCA ACCCAATGTA GGG

SEQ ID NO:631: (Length of Sequence = 221 Nucleotides)

AATTTTNACA TATCAGTAAT TGTTTTATA ATTTGTGGTT TINATGAAAC ATTGCTATGC ATTTATTAGG AAAAAGTAA
TTTCCCAACA GGTGAAGTGA AAAGNTATTT TAACTATAT ACATAATCAA GATCCTGCCT CTACGGAATT AGCTAAACCT
AAAAATGTTT GCATTAATGN ATAAATCTT CCNGCATCC TTGGGCCNGN TCTGGAGGTG G

SEQ ID NO:632: (Length of Sequence = 344 Nucleotides)

TGTGATGGAG ACAAATACIT CAGTATTGGG ACCCATGGGA GGTGGTCTCA CCCTTACCAC AGGACTAAAT CCAAGCTTGC
CAACTTCTCA ATCTTTGTC CCTTCGTCTA GCAAAGGATT GCTACCCATG TATCATCACC AGCACTTACA TTCTTCCCT
GCAGCTACTC AAAGTAGTTT CCCACCAAA ACAGCAATC CTCTTCAGG CCTGCTTATT GGGGTTTCAGC CTCTCCGGN
TCCCCAAGTT TTGGTTTCAG AATCCAGCCA GAGGACAGAC CTCAGTACCA CAGTAGCCAC TCATCTCTCT GGAATCAAGA
AAAGACCCAT ATCTCGTCTA CAGA

SEQ ID NO:633: (Length of Sequence = 378 Nucleotides)

GGTCAGACCT GAAGCGGCA CAGCGCTGTG ACTGCCAAG ACCCCACTG TAACAACAAC CCAGCTGCCA CCTATTTAC
TCAAGGCCCC AGGGCTCTCC AATTAGCAGG TAGTGAAGCC AGCCAGGCTT CTNTCCTTC CTTCAGTGCA GTAAGCTCCC
CTGGTCCCTA GATGCATTCA AAGGTGCTGT CTGAGAGCCA GGGCTCTCAG TCATAAACCT TATAAATCTA CCTGGNGTTC
TGTTCTACCA TCGCTGAGCT GGCAGTGAAT CCACCGGCA AATCCCTTCC CACINTCCCC TCCCCCTTN CCCAGGCAGG
GTAGTCTGTT NCCACCTACG AGTTCATCAC AGTCTCATGC GGGATTACTG CCAGCTTC

SEQ ID NO:634: (Length of Sequence = 28 Nucleotides)

ATCAGTGGTC TACCACAGNT TAAGTAACGG GTCATATTG GAGTATCACA CATCTCAGTC TTGTAGAAAT TAGGNACAGC
AATTAGGAGT CATGCACATA TANGAGATGT AATCCACCC TTTGACTATA GCCTACTCTT GINTTTTACA GAAAAGACTG
TGGNGGAAGA AAACCTTTA CCCINTTNTT CAGGGAGAAA CTNACANCAC TCANCTGCCT GGCAGTGAAA ATNTGGCATC
CAGTCCACTT TACCATCAGT GTTAAAGGAA ACCATCTCTG GTAAGC

SEQ ID NO:635: (Length of Sequence = 226 Nucleotides)

TTGGGATGAT GCTTTTATTA AACGGAAGCG TCCAAAAGG TCTGAGTCAA TGGTGGAGAG GGCAGTCAGC CCTGTGGCAT
TTCAGGGCTC CCCACCGATA GINATCGGCA GTGCTNACTG CAATGTGATA GAGATAGATG ATACCCCTGA CCACTCCGAT
GAAGGATGTG ATCCTGGTGG AGTCTCAGGA CCTCCACTT CCATCTGGG NGTGCCCTC CCTCA

SEQ ID NO:636: (Length of Sequence = 367 Nucleotides)

AACGCAATAA AAAGACAAAT TCCAAATGG GCAAAGATC TGAATAAACA TTTCTCCAAA GATATGCAAA CAGCCAATAA
ATACATGAAA AGATGGCCAA CATCATTCAT TATGCATTGC AGAAATGTAA GTCAAAACCA CAATGACATA CCAAGTTGCT
CCCACTAGEN TAGCTACAAT CAACAAAATG GACAGCAAAA AGTGTGGTG AGGAGTAGAG AAATCTGAAC CCTCATGTAT
TGCTAATGGA AACACAAAAT GATGGAGCTA CCATGAAAAA CTGCTTATCA GTTTGACCTC GGAAGTTAA ACACAGAAGT
ACCACATGAT CCAGCAATTC CACTCCTAGG TATATACCCC AAGGACT

SEQ ID NO:637: (Length of Sequence = 384 Nucleotides)

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TAAATATCA ATACCCACAT TAATAAAGC TATTTGGGAG CCTAATAAT TATCAATGGT GTAAAGGGGT CCTGAGACCA
 AAAAGTTTGA CTTCACCAGG TGTTTGAACA CTACAGATCC CATCTTGCCC ATGAAGCTTC CCTAGACATC CCCACCCAC
 CGTGCTCCT TCTGCATCCT ACAATAGCAT CCACTGGTAA GGGCCACTTA TTTTA

SEQ ID NO:625: (Length of Sequence = 305 Nucleotides)

GTTCCTAGAT TACTCAAATT TAGTACTCTT CCATCTTTTC TTGTTGCTAT TCTTTTAAAA TCACAAGAAG TCCATAACTT
 AAGTAGGAAT TTGTATAATG TAACTTATTG TGAGTATATT TCCTTACCAG CTCATAAAGA ACTATGTAAA CTGGAATGCA
 TATTTTINAC ATAAAAATAG CAAAAAATAA AAAANCAAAA AAAAAACAGT ACTGGCCTAA TACTAGTNGA NTTACAGAAT
 ANGGGTAAAT ANTACATGNN CATCCTTACA GAGTGAGCAT AAACAATACA TGGTAATAAT ATTTA

SEQ ID NO:626: (Length of Sequence = 300 Nucleotides)

AGCAATCACA TAAGGAAGGC ACCTCGAGTC TAGTAACACT GTGACTCTTG CGGTCTCTTA GAGGTACTTG GTGGTCTTGG
 ATAAGATCTG GAAGAAATCT TTGGATTTC AGACATAGGC TCTGTINCTC TTCCCTTACT TTCTOCCAAA CAAATGGCAT
 CTCTCTCTCT CTCTCTCTGT GCTGAGCTGC CTAGAAGTGT GGGTGGGATC ACACAAGCAC CCTTNTGGCC ATTGCCCTTG
 GGACTGTGCT AGGTGAGACC TGAAGTCAGC ACAGCATTGG GTCTACCCA ACACCTGTGG

SEQ ID NO:627: (Length of Sequence = 369 Nucleotides)

GAAAAAGAGA GAGGAGAGGG AGTCAGGAGT GCTTTGGAAC TGGAGGTTTG CTTTCCACTG ACAACATCCA TATCINCTGC
 TAATGCCAAC ATGCTOCCAA GTGTCTTAGT GGTGCCACA AAGTTGATCC AGCCAGAGG AGTTGCAGG ACAGTCAAGA
 AACCAGAGGT GCTGCCACA TCCCATCAC TCCCTTCCC AACTTCCCAG CCTTGCCCCA AAAGCAGCAG CTCAGGACAA
 CCTGAGATAC TACTGTNATG GGTCCCGGG AGGAGGACAG CAGGAGTCTG AACTCCAGAG GAGGGGGAAT ATGGGTAAAA
 CAGAGAGATG GCAAGGAGAC AAGCTGTNCC CAGACAGAGG GATGGGAGG

SEQ ID NO:628: (Length of Sequence = 310 Nucleotides)

TTTTTTTTTT TGAGACAAGA GTCTCACTCT ATCACCAGG CTGGAGTGCA GTGACATAAT CATGGCTCAA TGCAGCCTCG
 ACCTCTCAGA CTCAGTGAT CCTCCACCT CAACATCCA AGTAGCTGGG ACTACAGGAG AGCCACCATG CCCAGCTAGT
 TTTTNACTTT TCTGCAGAGA TGGTGTTCCT CCATGTTGCC CAGGTGGTTC TCGGAAGTCC GGGGCTCCAG CGATCCTCT
 GCCTCAGTCT CCCAGAGTGC TGGACCCACA GGCATGAGCC ACCACACTCA GCCCCAAAT CCATGATTTT

SEQ ID NO:629: (Length of Sequence = 443 Nucleotides)

CGCAGAGCAG AGGGTGGAAA GGCAAAGAGT ACAAGTGAGC GAGCCCTTTT TTGATGGCG TTGATCTGTT TACAAGGGGA
 CTGCCTAAAC ACTTTCCATT AGCCCCACT TCCCAACACT GTTCAGTGT TGAGTTAAG TTTCCAACAC ATGAATGCTG
 GGGGACACAT TTAAATTAGA GCAGTGATGA TCAGAAAGTT ATTGTTGGGA AAGGAGGTTT TATTTTAACT TAAGTAGCTT
 GAAAAAGCTC TTCAAGGAGT TGATACAAGA ACTGAGATTT GAATTAGAGG ACOGAGTAAA GTGAAGAATC TGCGGGCAAA
 GTCCAGGCA GAGGGAAGAG CAGGAATGA TTCATCAGTA GACTTGCTCT CCCATTCTCG GCAAGGGCTA TTTACATTT
 TCTTCCACTC TCTTCTCAG CACATCTCCA CTTGGGTTTT CTC

SEQ ID NO:630: (Length of Sequence = 263 Nucleotides)

TGGATGTGGT GAAAAGCGAA CACTTATAGA CTGCTACTGG GAACGTAAAT NAGTACAACC TCTATGGAAA ACTGTATGGA
 GATTTTTTAA AGAACTAAAA GTATATCTAC CATTTGATCC AGCAATCCA CTGCTGGGTA TCTACTCAA GGAAATAAG

SEQ ID NO:618: (Length of Sequence = 352 Nucleotides)

GCCATCCTG GCTAACACGG TGAACCCCGT CTCTACTAAA AATACAAAAA ATTAGCCAGG CGTGGTGGCG GGTGCCTGTA
GTCCACGCTA CTGGGAGGC TGAGGCAGGA GAATGGCATG AACCCGGGAG GTGGAGCTTG CAATGAGCCA AGACTGCGCC
ACTGCACTCC AGCATGGGCG ACGGAGCAAG ACTCTGTCTC AAAAAATAA TAATAATAAT AAAATAAAAA GTTTGTTAGT
ATTAGCAGAT ACATAITFACT AGGTACCCCC CATGCTCAAT GAAGTGTGG GNTACTCTNA AAAAGTGTCC AATCTTACAG
GTGTGACTTC CTCTGGAAT GCAAATCTT TT

SEQ ID NO:619: (Length of Sequence = 359 Nucleotides)

AAAAAAACG ACCCCACAA GGGGAAGGC CCCAAGTGG CCCCTGCCTG TNGTNCCTC TGGCTCCAGA GATGTCTGCA
TAGGCCTCAG CTCTCACTG GCAATCTCC TCTTCATGG CACCAGCCAC TGCTAAACAT CCTTCCCTCA CTTCTGTGT
AAGCTTGCTC CCTGAGCCA CAGGTTGCAC ATCTAAACCT CAGCTCCAGG GAAAGGAAGA ACCAATGGAA GTGCCAGAGT
CCTGGGGCAA GCCAGAGCAT CACCTGTGAG CAAACCTCTG CTGGGCACTC TAAGCAAGCA CAGGACAAGN CCCAGAGTTT
AGTGTGTCCA GTATCCAGCA TGGGACAGC ACATGCATT

SEQ ID NO:620: (Length of Sequence = 447 Nucleotides)

CTCTCTCAGC ACAGCCTGGG GAGGGGTCA TTGTCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG
CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGTCT TCTCCACTAC
CCCACACCAG CCTTGGTCC ACCAAAGTG CTCCCCAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA
TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCCTGGGAT AATTTTTTGT ATTTTTTAAG
TAGGACACGG TTTCACCATG TTGGCCAGG CTGGTCTTGG AACTTCTTGA GGTGTAAATG ATCTTNCCTC ACCTTNTGCC
TTCCCAAGTG CTGGGATTT ACAAGGTTT AAGCCACCG AATCCAT

SEQ ID NO:621: (Length of Sequence = 237 Nucleotides)

CAATACCCCT GGTCTCTGGG GCAGGTGTTT TGGGATCCTG GACAGGAGGG TCAGGTGAT TTTAACCCAG AGAGACCTGA
TCTCATCACT GTCTTTTGA GGGGAGAGAA GTTGTGTCG GCCAAAGGG ACCAGTGTGT AGAACTGCTC CTCCAGCTCC
TTGGCGATGT CACTNGTGGT CTTGGCGTTN ATGGAGCCTA CAGGGGCCCT AGGACCACTG CCCCNTTGG CAGCGGC

SEQ ID NO:622: (Length of Sequence = 247 Nucleotides)

AGAAGGTCAA TAATAACAA CTCTTCAAG GTAAAGCAGG ATGTTGGAAA CCATTGCAAG GAAGCTAAAA ACCTTGAAAA
AAGATTAGAA GAATGGCTAA CTAGAATAA CAGTGTAGAG AAGACCTTAA ATGACCTGAT GGAGCTGAAA ACCATGGCAC
GAGAAGTACG TGATGCATG ACAAGCTTCA ATAGACAATT CGATCAAGTG GAAGAAAGGG TATCAGTGAT TGAAGATCAA
ATAAATG

SEQ ID NO:623: (Length of Sequence = 315 Nucleotides)

AATTTAGGTT TGTTTTATTT AAGTTTAATG TTAATTCAT GCTGTGTTT AGTAAGANCA ATACAGATTG TGTATCTGTG
GCTCCAGTCA GATATCCAGT AGTACAAATN AGCTTCAAGT TACACATACT GANCAAAAGA GGTGAGCGA GCGAAGGAGG
GGAGGAGTGA GGGGAAGGAG GTAGGGGGAG GGGGAAGGAG AAGAAACAAA AGANTGAAC AGGCATGCAG GCTTTTCCAT
ACCACCTTCA ACGCTAACCT GCTTCAGTGG GAGAGTAAAG TAGGCAAGAN TGAGCAGCCA CGGATTGTGT AACTG

SEQ ID NO:624: (Length of Sequence = 375 Nucleotides)

CCATGTTGGC CAGGTCTCGA ACTCCTGGCA TCAGGTGATC CGCCCGTTTC AGCCTCCAA AGTGCTGGGA TTACAGGCTT
GAGCCACCAG GCCTGGCCCG TTACTATTGT TATTTTAAA TGCATTAGTA AAAAAAATAA AATTTTAAT TGCTAGAAC

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GTACATATAT GTGTATATAT GTATATATCC CACATCTCCA ATTTCCTAT ACGTATATAC ACACATATAT GTTATATAGG
GTTACAGAT ATAGGATATG TGTG

SEQ ID NO:612: (Length of Sequence = 384 Nucleotides)

TGATGACCAT AAGCCCATGC TTTTCATAGA TGTTAAGGG TTAAATGAGG TAATGCATGT CGAGTCTCA GCCAACTGAG
ATTCAGGAAG CGCTCAATAG ATGCTGGCTG TCATTATTAA CTGAGTAAGT AATCCCTTTC CCACAGAAGC AGTAGAAGGC
TGACGATGTG TGTGAAAAGG ATGGATACAA TTCCCTGGGC CACAAATAAA GGTTTTTTTG GTTGTGTGTG TTGTTTAAAT
GAACTGAAAT GAGTTTGAGA GATTCAATA TTATTTTACA ATACTTCTTA ATGCTAGTTT AAAAGTTCACACATTTGTCAT
TCTACTCCAC TTCCGTATGA GATAAGTATA TGAGGGNGCT TAAITCCCG NTAACTAAG CAAG

SEQ ID NO:613: (Length of Sequence = 342 Nucleotides)

TATTTATTTT TGTTGGTGTG GACTTCCTAT GTGGGCTTTT TGGGTGACAC TCCCTTAAGG GTTCAGTTTG ACAATTCINA
GAGTTGTCTT CGAGTTGGAG GCCACCAGAG GTATCTAAGC TCCTGCTTC CTATTNATA ATCTCCAGC CCCAGCAGGT
CCACTCCTGG TTCTGTGTG TTGGCCCGG GCACAATCCC CACTGCTTTG CTAGACGTGC TTTCTGCCAT GTGGCTTTGG
GCCTAGAGCT TGTGTATAAT TGCAGCTTGT GGCAGTGGAA ATATGGCTGA ATGAGCGTCT AAACCCCTGG GTNGGGGGNC
TNAANTNCNN GGGTTTTTAA AA

SEQ ID NO:614: (Length of Sequence = 393 Nucleotides)

CAGTGTATT AACATAGCC AGGAGGTGGA AGCCACCTAA ATGTCCATCA ACAGATGGAT GGATAAATGA AATGTGGTCT
ATACATACAA TGGAAATATTA TTCAGCTTA AAAAAGGAGC AAATCCTGCC ATGTGCTACA ACGTGGATGA ACCTTGAGGA
TGTTTGTCTA AGTGACATAA GCCAGTCACA AAAAGACAAA CGCTGCATGA TTCCATTAT ATGAGGAATC TAAAGTAGTC
AAACTCTTAG AAAGTAGAAT AGTGGTTAGC AGGGGTTAGG GGGAGGGGAA AAAGAAAAGT TACTGTTTAA TGGCTATAGA
GTTTCAGATA TGCAATACGN NAATTTCTGG GGGATTCTTT TGCACCACCA ATGTGCACCG TATAATTCCA CTT

SEQ ID NO:615: (Length of Sequence = 310 Nucleotides)

ATTATATACA TTCTTTACT GATTTTAA AATGTGTCA ATATCTTCAG TGAATCTTA ACAATCTGGG GAACGTGTTT
CCTCAATTAC CACTTCAGCA ACGTTCATAC GAAATCAAGG CTGCGCTTCA TGTGAGTGT AGGNTCAACT TTAACGAA
GGTTTGTGT TGTCTTAAC ATCTTCAGAG TGAGCTTTAG GGATGCGTGA AGGATGGACA GTACAAGCAA GCAGCTACTT
CCATGATACA GTGGGAAGAT AAAAAGGCC ATTCACTCCA GCCGTGACCT GTAAATCCAG CTGCGCTCC

SEQ ID NO:616: (Length of Sequence = 266 Nucleotides)

GAGATGGAGT CTCGCTCTAT CACCCAGGCT GGAGTTCAGT GGCACGATCT CGACTCACTG CAAGCNCOCG CCCCAGGTT
CACGCCATIN TCCTGCTCA NCCTCTCGAG CAGCTGGGAC TACTGGTGCC CACCACCACT CCCAGCTAAT TTTTNTATT
TTTGGTAGAG ACGGGGTTTC ACGGTGTAG CCAGGATGGT CTCGATCTCC TGACCTCGTG ATCCACCCGC NTGGGCTCC
CAAAGTGCTG GGATTACGAG CGTAAG

SEQ ID NO:617: (Length of Sequence = 376 Nucleotides)

ATAATAATGA AAAGTGAAGG GTGGGGTGC TGGCCACCTC CCATTTCTTT GCCTGGGTGG TGGTGACCAC GCGGCCCTTG
TGCTCTTCC ATGTGTTACT GAGGACCAAT GCCCTCATGG GCCCAGGCCA CAGGCACCCA CCTGTNAGCC TCACCTGCCA
CCTCTCTCCA TGTGGCTTIN TTGCCCTGG GGCTGGCCTG GGCATGGGG AGCTTATNTC CCGACCAGG GCCTTGGCCA
TGINTCCTTC ACAANCCCA CTCCCGCGG ACTGAGCCTC CACTCTCTGC TGGGCTGAGG GCTCTGTGGT NGCCAGGAG
CCCTCCAGC CAGTGCCAG CCATCCCAT CATCAGCACT TGGTTTAAAG CTTCAA

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TGCCTTCCTT TCTTCAATTC GAGACAGCAG TATCATTAGT GTTGTATAGG TTATAATTAA ATCTAAGTAG TTCTTTGTTA
 AATCAAAGTT TACAGTAATA TCAAAGAAGA CTGCGCAAAC GTCAATAGTA TTCAGCAATT CACAAACATG GTCCTTAAAT
 TCCATAACAT CTACAAATGT GAAGTAATAT AATGCCAGAT TTINCAGAAT CTCTGATTTT CCTTTCTGTA GTTGTGCAAG
 CTGTTGATTG TTGTTGCGGG TTTCTACAGC AGGGAATTTT CTGACTATGA ATTTACAGC AGATTCCAGG NTTTTGTGCA
 TAAGATAGGA TGGNITTGCC NTGGGGNCTC CACATGCCNT TCTTGATGTT GTAGAGGCGG GTGAGCATGC CGACGGCCC

SEQ ID NO:607: (Length of Sequence = 412 Nucleotides)

CTGTACCCCTT ATAAAGAGTG AAAGCCCTGC CCCCTTCTCC TATAGAACCC CTAGCAAGGA GACTGGAAGA NTCAAAAACA
 ATCCACCCAA AAAATGGCCT GCAGGGACAC AGTCCCAGAG AAAGAGACTA TGTACAACAA GGTACAGTAA GTAAGACCTG
 CCCACACACA GGACTTCCAA TCGACTTCTT AGTGCTTACT CCTACAGATG AACAGATCAA CCAGGGCCAC CAGATGCTCC
 AGGAAAGACA GGAGTCCAAA AAGAAAATTC GGTAAAGTTG AATATATTTT GAGCAAATTT TCAGTTCTGT TGAAGTATTG
 GGGGGACATT CAACAGTGAG TAGTAGTTTA GGGGAACAG CTGGCACCTC TGGCAGTCC CTCAGAGGTC AANCCAGCGT
 NTAGGTTGCT TT

SEQ ID NO:608: (Length of Sequence = 419 Nucleotides)

ATGAAGGCAG CTGAACCTC CATCAAGTTT CTGCCTCCCC AACGTAATAT GGAAGTCGTT CTGGCTGTAG GACCCAGCT
 GATTGGAATT GGAAAGCACA GTGCAGCTGC AGAGCTCTAT CTGAATCTGG ACCTTGTCAG GGAAGCAATC GATGCTTTCA
 TOGAGGGTGA GGAGTGAAC AAGGCGAAGG TTGTAGCTAA GGAGTTAGAT CCCAGGTATG AAGACTATGT GGACCAGCAT
 TATAAAGAGT TCCTCAAGAA TCAGGGCAAA GTGGACTCCG TGGTGGGTGT GGATGTGATA GCTGCTTTGG ACCTGTATGT
 GGAGCAGGGC CAGTGGGGAC AAGTGCTTGA AAACAGCTAC CAAGCAGAAC TACAAGATTC TGCACAAGTA TGTGGCTTTG
 TATGCAACTC ACTTGATCC

SEQ ID NO:609: (Length of Sequence = 337 Nucleotides)

GGTGAAGTT GTAGTGAGCC GAGATCATGC CACTGCACTC CAGGTTGGGT GACAGAGAGA GGCTCCATCT CATAAAAAA
 GAAAAGAAA AGCATTTCCTG AAAGGAATAA AAAACAAATT GATAACATCC CCTAATCTCT AGTTGTGGG ATGTAGTATC
 CTTCATTTGA TCAGGAAATC ATATGATTGT CCTTAAATTA TTAAGTTGGC AGAATTTGTG TGGTTTCATA ATGATGCTTG
 TAAGATGATA TTTAATGGA AATGTTTTAG ACTATATCTN TTGTNGTTTT TNCCTCTGTN TTTGTGTAAG GCTTAAANCT
 ACCCCCTTTA AAAACAG

SEQ ID NO:610: (Length of Sequence = 441 Nucleotides)

TAAGCCAGAG ACATTTCACT GTATTAATCT TGATACTAAT TACTAAGGCT TTTCTGTGGA CATTAAATTT GATCTGTTTA
 ATTGCAAATA CAATAAAGT CGTGATTAT GCTTAATGTT TCTGCTAGGC TGATGACATT TTGAAAATGG CACTTATAGC
 CTGGTTTGTG TTGGTTACAA CTTTGTGGC TCCAGATGCT AAAAAAATC TAATTGAGTA AGTAAATAAT GCAGCTAAGC
 GTGCCTCTCT CGCTTCGAA AAGTTTTTTC TACTCCTTTT TCTCCCTGGA GAGGCCCTGC TGCACACTGA TGCTGATCTA
 AGGAAATGCC TTGCTTCTT TGCCACTGAG CAATGTTAGA ATCACTAGGA GGGCAGGGCT ATCCCACTGG TCACTCTGTC
 CCAGCATATC TACCATGAAG TCAGCAGGGA CTACAACTC C

SEQ ID NO:611: (Length of Sequence = 344 Nucleotides)

TTTGGTACAG TAATTAGGTT TGGTTGATTC GGTTATGGGG GTATACACGC ACATGCAAAC ACACACAGGG TGTGCGTGTG
 TGTATAAGG GGCATATACA CATGCACACA TATACACATA TGTTATATAG GATGTGTGTA TATGTGTGTA TATATATAGG
 GTGTGTATGT ATCCTATATA TGTCATATA CATGTATATG TNGTATATAT ACATGTATAT GTACACATGT GTGCATATGT

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COGCTCTCTG GGTTCAGCA ATTCTCTGCTC CTCAGCTCTC CGAGTAGCTG GGACTACAGG CGTGCGCTCC ACCACCAAGC
 COGCTAAAT TTTGTATTT NAGTAAAGAT GGGTTTCTC CATGTTGGCC AGGCTGGTCT TGAAGCTCTG ACCTCAGGTC
 ATCCGCGCGC CTGCGCTCC CAAAGTCTG GGATTACAGG CGTGAGCAGN CGCACCGGC CAGCTGCTTC TATTTTAATC
 TGAAGTTGGA AACACCTTCC TACTTTAAGG CACAGGATCA GGGTAAGAAC CCACATGTAC GAGCTAACAG AGCTGCACCT
 CAAATTTACT TAAGTTAATT AA

SEQ ID NO:601: (Length of Sequence = 319 Nucleotides)

AGTACTATTC TGCCATAAAA AAAAGAATGA GATCCTATCA CTTGCAACAT CTTGGATGGA ACTGGAGGTC ATTATGTTAA
 GTGAAATAAG TCAGGCACAG AAAGAAAAAC TTTGCATATT CTCACTCATT TGTGAGAACT GAAAATTAAA ACAATTGANC
 TCACGGAAAT AGAGAGTATA ATGATGGTTT CCAGAGACTG GGAAAGGTAT TGGGTGGGGG GCAGGGAATG GGGAAAGTTA
 ATAAGTACAA TGCAATGAAT ACGATCTNGT ATTTTACAGC ACAAAGGGT GGCTATGGTC AACATAATT TATAGTACA

SEQ ID NO:602: (Length of Sequence = 334 Nucleotides)

CACCCACAGA CTGCAAGTG GGACAACTTT CTGGCTTTTG AAAGGCTCCT TCTTCAGAGC ATTGGGGAGT CAGCAATGTC
 CGTTGIGTTA AATCAGCTGC TGCCCATGAT TAAGCCTGTA ACCCAGAGAA CCAACGAGGA CTACAGCCCT GAGGAACTGC
 TGATCCTTCT CATATATATT TATNCTGTCA CTGGAGAGCT CACGGTAGAC AAAGACCTGT GTGAAGCAGA AGAAAAAGTC
 AAGAAAGCAT TGGCTCAGGT CTTCTGTGAG GAATCTGGAT TGTACCTTT GCTGCAAAA ATTACGGACT GGGGACTCTT
 CAATTAATCT GACA

SEQ ID NO:603: (Length of Sequence = 410 Nucleotides)

TTTCACCATG TTAGCCAGGA TGGTCTCGAT CTTCTGACCT TGTGATCCG CTTGCTCGGC CTCCCAAAGT GCTTGTATT
 CAGGCGTGAG CACCCGCGCC CAGCCAGGAT TATTTATTTT TAAATCAGAG AACTTGAGTA CCACCTAAAG GGACTTAAAT
 TATGCAATTG GAATGAACT AAAGTGAATT GAACATTTAG TTTCACCTAG ATTTTATTTT TCCTGCCAAC TGTCTATGA
 GAGTTTGAGA GGGAGCCCG ATTAGACTTA GAGAAAAATA AATAAATTAC ATTTTATCTG CACACATGAA TTCTAGAGTG
 AGTTAAATTT ACCACAGCGG GGCATATATA TGTATATATA TGATACCNIG TTTTATATA GCTCCNTATA GTTTTAAAG
 CACTTTGTAC

SEQ ID NO:604: (Length of Sequence = 399 Nucleotides)

TCTCTAAGCA AAAAGAAAT GATGAAAGAA GCAAACCTGG AGCATCAGAA AGGAAGAAAG AACATGATAA AATGAAATA
 TGAGCTCTTA TTATGAACAT CGTATTACCA TTCTATGTGA AACTTAATCG TATATTTATA TATAAGCATC CTTCAGAGAT
 GCTGTGGGTT CAGTTTCAGN CCACTACAAT AAAGTGAATA TAGCAATAAA GCAACTCATA TGAATTTTTT GGTTCCTCAG
 TGCATATAAA ATTAANCTTC ATGCTATACT GTAGTCATTT AAGCATGCAA TAGCATTATG TCTAAAAANT GTACATACCT
 TTATTTAAAA ACGCTTTTAT TGCTTAAAN AGGCTAAATG GCCATCTGA GCCATCGGCT TTTTCTCTGG CAGAGGGGG

SEQ ID NO:605: (Length of Sequence = 372 Nucleotides)

ATGCCCTAGA AATCCTACCA CCTCCCAGAA ATGATAGTTA TGGAAATTAA CATGSCATGT CAGATATGGT TCGCTGATGC
 CTTGCTTTAG TTCTCAGAAA TAAGGCTTTA AAAGACTGGC ATGTTTCAGG ATTGCTGTCA GGAAATGATA ATTTAAAATA
 CCAAGAGTA CACTAAGAAT TATGGAAGCA TCTGTGAAAC TAATAAGCCA GTGGACATAC TGATTTTTTAC CAATGTGTCT
 ACATACTATA TTAATAAACT TCCTACAAAG TATTGTCCCA ATTCAGTTCA TCTGAGGATG TGAAACACT ACAGTGTACC
 TTAAACATC ACATTCACAA CCTGACAGA CTGAAATAAA ATGAAATTAG GG

SEQ ID NO:606: (Length of Sequence = 399 Nucleotides)

206

GAACATGGCC GTGAAGTCT CGGAGATGCG CTTGAACAGC TCCTGGATGG CCGTGCCTGT CCGATGAAG GTGGAGGACA
 TCTTGAGGCC GCGGGGCGGG ATGTACACACA CGGCCACCTT CACGTTGTGT GGGATCCACT CCACGAAGTA GCTGCTGTTC
 TTGCTCTGGA TGCCAGCAT CTGCTCGTCC ACCTCCTTCA TGGACATGCG GCCCCGGAAC ACGGTGGCCA CCGTCAAGTA
 GCGGCCGTGG CCGGGGTGCG AGGCGGCCAT CATGTTCTTG GCATCGAACA TCTGCTTGGG TGAGCTCGGG CACGGTCAA

SEQ ID NO:595: (Length of Sequence = 370 Nucleotides)

GAAGAATANA AAGAAAAATC CAAAATGAAG AGTATTATAC AAGACAATA GTCAATAGTC TTCAAAGTGT CAAGGTCATG
 AAAAATTGAG GAAGCATCCC AGACTGAAGG GACTAAAGA AAAGTGACAA CTAAATGTAA TGGGTGATTG TGGATTAGAT
 CCTGGAATTG AAAAAGAACA TTCAATGAAC AACTGACAAA TTGAATAAG GTCTGTAGAT CAGTAACAGT ATTGCATCAG
 TGTTAATCTC CTGGTTTAGA TCATGTCCTA ATGGAAATGT TTTGTACTAT TTTTGTGGA CTCTTAAGGA ATGTGGGTGG
 AGGACACGGA TGAGACCTAC TTGCATCGAC AACAAGGCGT TCTACGGACA

SEQ ID NO:596: (Length of Sequence = 335 Nucleotides)

CCACAGAGCC CCAACTCCCC CCACAGGAGC CAGCTCCCCC TCGAAGGCGT GGAGCAGCCG GCCTGTGACA CCTGAAGCCG
 CCAGCTCGCC ACAGGGGCGA GGGAGCTGGA GATGSCCTCC AGCGTCAGTG CCAAGACTGA GCGGGCCCTC CAGTGTGTGTC
 CAAGGAAATG TAGAATCACT TTGTAGATAT GGAGATGAAG AAGACAATC TTTATTATAA TATTGATCAG TTTTATGCCG
 CATGTTCGT GGCAGTAGAC CACATCTGTT CGTCTGCACA GCTGTGAGGC GATGCTGTTC CATCTGCACA TGAAGGACCC
 CCCATACAAG CCTGT

SEQ ID NO:597: (Length of Sequence = 336 Nucleotides)

CTCTGAACA TCACAACTT GGTTCCTACC TACCACACGA GTAGCCAAAA GAAAAGAAGC ACTAATAGAG AAAGGGGTGT
 CTCACACCAG ACAGAGGACC TCTGCTGTCA ATTAGATCCA GTATCATGAC CTAACCTTAA GTGTGAAAA GAGTTCAGAT
 CTCTGAGACA CTGTGAAGAA ATGGATGGCT CATGTAAAT CTCTGATCC TCACTCCCA ACCCTGGACG TGTTTCATTT
 ACAACATTCA TAGGAGTTAA CTTAGCAGTG TTGCAAGTAA AGGTTCNAAA CCAATTATT TAATCAGTGT CCCCCAATA
 AAATCACITA TCCCATTTTA TTGCTAGTTT AGTTTT

SEQ ID NO:598: (Length of Sequence = 402 Nucleotides)

ACCACTACAC AATATATCTA TGTAACAAA CTGCATTCIT ACCCCTTAAA TTCATACAAA TAAAAAAAT TAAAAATAA
 ATAAAGTAGG ACAATCCCC AGATAAATAA ATTAATAAAT AAATAAATAA ATAAATAAAT AAATAACTTT AGCTCTTGCC
 TTCTCTACA CATAAGTTAA TGCTGATGG GGTGATGGT TATGCTTCTG TAAACTATAA TCAGATGTAC TCTTGACCCC
 AAACCTAGAT GCGATTTTNC GTATACGGA ATCTTTGCTA CCTGTATATA AACTGTGGAA CIGAAAATGC TGCATTGGGA
 GCAGTCTGAT AGGNTCTGTC CTAAGGGCT ACTCTGAGGG GCTCTAGGGG CTTCAGTCTA CAGGCCCCCA GGGAGGACTG
 CT

SEQ ID NO:599: (Length of Sequence = 369 Nucleotides)

CTCAACAAAG TTGGATTTT NTCCACGATG ACTCCTTGGG TGAATTTTAA ATCAAGTTAT TTCAACCAAT TTNTCATAT
 ATTTOGTGCA TCCCTATTCT GGTATTCACT GAATACATGG GAGAGGTATG TNATTCTCAG CTCCACAGC CCATAAGTCG
 GGAACACAGG ACTTCATTCC CCTCTGCTCT AACTCAGACT GTGAGGTGAT TGAGGGCAAG ACTGATGAAT TGTTCTCTT
 CCTATCACTG GTGCCAAGCA CAGTAGTTGG CATAAGAAG TTACTCAATA AAGAGGGGGT GAATTTAATG AAAGACAGAG
 GAAGNGGGA CCTGGGGGAA GAGGTGGCA TAAAGTGAAG GTACAAACA

SEQ ID NO:600: (Length of Sequence = 342 Nucleotides)

205

AAGAACATTT AAGTAGTTCA TACAAAGAAA TATAAATGT NCTTAAATAT ATCAAAATAT ACTCACCTCA TTCATAGTAA
 AAGAAATAAA AAACGTGCT CTGATGACAT TTTTCATCTA TGAGATTAC AAAGNICTAA AAATTGAGAA TATACATTTT
 CTATTGCCTT TGGATGGCAA TTTGGCAGTA ACTATCAAAA GTATAAATAT CTATACCCTT TGAGGTGTC AATCTATTTT
 AAAGAATTTA TTCTTCAGCT ATGTACATAC ATGTAGG

SEQ ID NO:589: (Length of Sequence = 353 Nucleotides)

GTAATGAATT ATAAGAATCT GAATTGAGAG CTAAAATATC TGGGTGTAG GCCTACTCTG CCACGNITTT NITATTGCA
 AATATTAGAG CTGAAC TAGACTCAA GGCTCTAACC AACTCCAAA CCTACAATTC AATGGCTGAC TGATATACAT
 TGTATACTCT TTA AAAACAA TTA AATCAA AGANGTAAT AAATGTGTCA TGTATTATAC AACTATTATA CAGGTGTGTG
 TGTATATATA TATATNININ CACAGAGAGG AAAGACATCT ATACATAGNC ATAACCATCA AATCAGTCAG AATTTCATC
 AGACACTTTN CATTTCCAG GTCCATCAGA TGG

SEQ ID NO:590: (Length of Sequence = 364 Nucleotides)

CICATATACA TAAAAAGTGA TAAGAATCCG AAAAGACAGC CAGGGGAATT AAATGCCAGT TGGGGCCAAC GGGGCCCTGA
 TCAAGGAAGA GGGCGCCCC AGCTCTCAAT CTTCACAAA TCCCTGCACC CAGGGTCACA GAGCATGCGC AGGTCCCTCC
 CGCCACTTC CGGGCAACT GCCAACCACC GCGCAGGCTG AGCCCCAGGC AGGAAGCAGC CCACTTGGTG GGGTTGGGT
 ATGAGTCCTT CCTCGGGGG GCTCGGTGGG TCTGAGTAT TCTTTGGCG GATTINCTGA TCGTCTGCT CCAGGTGAGC
 TNGGGAAGGC CCCAGGAAA GGCCANAAG GGCCTTGCC AGGG

SEQ ID NO:591: (Length of Sequence = 311 Nucleotides)

GAAAGGGGAA TAGGGAGTTA ACGTTAATC AATAGAGTTT GGAAGATGA AAACGTTCTA GAGATGAGTG GTGGTGATGC
 CACATAACAA TGTGAGGGTA CTTAATACCA CTGAACGTGA TGTTTAAAT GGCAAAAAGG GTAAATTTTA TGTATGTAT
 ATTTTACCAG AATTTTTTT TTAAGCTTA CTGCATGGG ACCAAGCGTG GTGGCTACA CCTGTAATCC CAGCACTTTG
 GGAGGCCNAG GCGGTGGGT CACTTGAGGT CAGGAGTTCG AGACCAGCCT AGCCAACATG TTGAAACCCC G

SEQ ID NO:592: (Length of Sequence = 358 Nucleotides)

ATTTTGGTTT CTACCATCA TCCTCCTCTC AAAGGAACCA GGGGTCTTG GGGATTGGC TGATGCCAGG GSATGGAGAG
 TGTCACTTGG NCTGAAGGG GAGGCTGCA GCATGTGTGT GGCAGGTGAG ACAGACCCAA GAGCCAGCTT GGTGGGCAT
 CCTGGCTAC CCTGGGACA CAGTGAGCG CGAATAAAT AACATCAGGA ATGGNTACA ACGCAATGAG TAAGGGGAAT
 CTGAGTCTAT AGGGATACAG ACCAGAGGT AAATNGCCAT GGCCACCAC TTTCTACAG GAGAATGTGA CTAGTTGAGC
 GTAGGAACAT GGAACAAAT GGTAGAGGTG GCTGACAT

SEQ ID NO:593: (Length of Sequence = 354 Nucleotides)

GACAGACTGA AGGAATATAT GCAGCTTANT TTAACATTTT TTGAAATTTT ATATTGCAGA AGTTGTACAT ATTINCTGTT
 GTGAATTAG AAAGANITGA CAGGCAAGGA GGGTGTCTA CAAAGCACTC CATAGATCCA CCATACTGAG ACAATGCTTA
 ATGCTTTGAT GGAATTTATTT ATTINATACT TTCTATGCAT ATGCATGTAT TGTATAAATA CGNATGCATG GTTAAATAGA
 AATGGTCTC CTGGGTGTT TGTATATCCA TTTATTGTTG TGAAGTAAAT CCCCAAGAG GTAGGTGTGC TTTTGCTTGA
 GGAGTCTTTT GCTACATACT GGCTGTACAT AATG

SEQ ID NO:594: (Length of Sequence = 319 Nucleotides)

204

GINCTGCTGG TAGTGGCCAA ANACCTCGAA AACAATGGGC TNGCTCTTGA TGTACAGGTG GCGTTTATTT TCATGGATT
ATACACACTG GAAAAGCCTC T

SEQ ID NO:583: (Length of Sequence = 399 Nucleotides)

CCCAGGCCAC CATTAAAGC AGCCATTCCCT GCCAAGAGC CAACATTGAG GCCAGCCGTT GCTCCAGCTA ATGTCTGCAG
GGCTCCAAGT GAGGCTATGG GGTGACAGA ATTACTGCTG CTAGAGCTAG GTGAGGACCC TGAAGTAGTG AGCAGCGTGA
GGGACTGCT GATGTAGTG AGAGCATTGG TACCATTGG TGTGTTCTGA NNTGCACTAG CTGCAGCAGC TAGTGCAGCN
AAATTCTGTA ACTGCATTGC ATTCAACCCCT CCCATTGGGT GGAGGCTGCT CAGGGTGTG AGGTCCCAG AGGAGGCAGT
CTGCTGAAGG AGTGCTAAAT ACTINGGCTC AAGAGTATTT AGACCAGCAA GGTTCCTCCA CACAGATGCT GCGCTGATT

SEQ ID NO:584: (Length of Sequence = 441 Nucleotides)

GTGTTTTTAA AGGATTAAAT GAGATATTAC ATGTAATGTG CTCATCCCAG TGCCAGCAC ACAAGAAATG TTCAATAAAA
TAGGAGGCAT AATTGTCTG TTTGAATACT AGATAACCCCT TTTAATGGAT ATTCTACAAT TATGAATCTA AGGTGCTTTG
GAGGAGCCTA GGCAATCTAT TCCAAATTA AATGTAAGGA AGGTACATGA GTAAGGGATG GAGTAGGCCC TGGACCAACA
CTAGAGCTCC AAATTTCTTA AAAAGCTTGA GCTTCTTTTA CTGTTGGCCAC GCCTATAATG GGAATAAATC TGGTCTTCA
AACAGTCCCT CCCCTCTCTA AGCTCTGCTG GGGAGTAGAG ACATCAGCAG GCTGGTCTG TGNITAGCTC CTCCCCATCT
TNGACTCTCA TCCCATTCCC TCTTCTCTAC TACCCATTCA G

SEQ ID NO:585: (Length of Sequence = 326 Nucleotides)

GAAATGCAGG TTCAGCTATT TNCCTCTG AGAGTCCAGT TAACAAAAGT GAGTNCCTGGT ATAAAGAAAG TNATTTTTTT
TTTTTAAATT ATTCCAAGC TAGCTGAGGG GAACAAGTAC AGGCTTCTG CCTAGGGGTA TCACTTTGCT TTGGAGCAG
GAAGTAAGCA CTTTTAAAG GGGCTTAACA TGAATGGCAC ATGGGGTCGG GGGAAAGTAAG CAAGTGCAGC ATCTACATGT
TAGTTTGTA CTTTATCTAC TAGGTAGTCA AGGTGGTGAC TGCCCTGNTC TTTGTGGGGC ATGTGTACTT TGGGGTTGTA
AATTGG

SEQ ID NO:586: (Length of Sequence = 431 Nucleotides)

GAACGAAGGA AAAGCATCAA AACCTACAGA GAAATTNTTC AAGAAAAAGA GCGGAGAGAG AGAGAGCTGC ATGAAGCATA
TAAGANCGCT CGGTCCAGG AGGAGGCAGA GGGGATCCCT CAACAGTACA TTGAGAGGTT CACCATCAGT GAGGCTGTTC
TGGAACGCTT GGAGATGCCA AAAATCTTGG AAAGAAGCCA TTCAACAGAG CCAAATTTAT CCTCCTTCCT GAATGACCCC
AATCCCATGA AATACCTGG GCAACAGTCA CTGCTCCAC CCAAAITCAC TGCCACTGTT GAAACCACCA TTGCTCGTGC
CAGTNTCTG GGATACCAGC ATGTCAAGCA GGCAAGTGGG GTCTNCAAGC AAAACTTGTC ACTTCCAAA AGCAAGTGCC
TATGCTTGAC ANCCAGGCC TTAATCCCA G

SEQ ID NO:587: (Length of Sequence = 338 Nucleotides)

CTCAAGCAAT TCTCCACCT CAGCTCCCA AATAGCTGGG ATCACTGGCA CAAACCACCA TGCCAGCTA ATTTGTATT
TTTGTAGAG ACAGGGTTT ACCATGNGC CCAGGCTGGT CTCAACCTCC TGGGCTCAAG CAATCCTCCT GCCTCGGCT
CCCAAGTGC TGGGATACA GATGTAGCC ACCGATCCA GCCCACCACC CTCAATTATA CCAATTACCT GCCAGTAAC
TGTGACTTT TGCTTCTCA CCCCTCTCT GATCTGGAAG GAGAGGGATT ATGTATAGC TTGTAGCAC AGTCCCAAAG
TTCAATATTT CTGCGGC

SEQ ID NO:588: (Length of Sequence = 277 Nucleotides)

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SEQ ID NO:577: (Length of Sequence = 405 Nucleotides)

GAATGAAAT GGCATATTG AACATAAAT TAGGGCAGAT TTTTACTACT TTTGAAAAA TGTGGAAAA TATTTCTGTA
 TGAAAOGTAA AACAACTTTT AATTTTTTTT AGAAGTTGAG AGGATTCTAT TTTGCAAAGC TGTATTATGA AGCTAAAGAA
 TATGATCTTG CTAAAAAGTA AGTACAACT GTAACATGTA TTCTTTTTTT AAAATCAATG CCTTINCICA TTINCITCTT
 TGAATAGGT AAAAATATGT CCTAGTAGT TCTTCTAAG TGTATTCTGG AATAAGGGAT TTATCACTCA GACTGATGCT
 AAGGACCAGC CTAGATTCCA TTGAGATTGA AACCGTAAT AGTGTTTTCT GCATGCTGCT GCTTTATACC AAGGGCAAGA
 AATTG

SEQ ID NO:578: (Length of Sequence = 406 Nucleotides)

CGCTACAGGG GGGGCGTGAG GCACTGCAGA AAGTGGGCCT GAGCCTCGAG GATGACGGTG CTGCAGGAAC CCGTCCAGGC
 TGCTATATGG CAAGCACTAA ACCACTATGC TTACCGAGAT GCGGTTTTCC TCGCAGAACG CCTTTATGCA GAAGTACACT
 CAGAAGAAGC CTGTGTTTTA CTGGCAACCT GTTATTACOG CTCAGGAAG GCATATAAG CATATAGACT CTGAAAGGA
 CACAGTTGTA CTACACCGCA ATGCAATAC CTGCTGCAA AATGTTGTT TGTCTCAGC AAGCTTCAG AAGGGGAACA
 AATCTTATCT GGTGGAGTGT TTAATAAGCA GAAAGCCAT GATGATATTG TTACTGAGTT TGGTGATTCA GCTTGCTTTA
 CTCCTT

SEQ ID NO:579: (Length of Sequence = 374 Nucleotides)

GTGGGCGTGC TCTGGAGTCC ACATTGTAAT ATATTATGCT GCAGTAAATA TTAATCTTGA GAACTAGGTG ATATGGTTTG
 GCTGTGGGCC ACTCAAATCT CATCTTGAAT TGTAGTCC ATATATCCCA CATATCATGG GAGTAACCTG ATGGGAGGAA
 ACTGAATCAT AGGGCAGTGA TTCTATGCT GTCCATATA TAGTGAGTTT TCACTATATC TGCTGGTTTT ATAAGGGGCT
 TTCCCCCIN CCTTTGCTCT GCATTTCTCT TTCGSCCAT TATGAGAGGA AGGACATGTT TGCTTCCCT TCTGCCATGA
 TTGTAAGTTT CCTGAGGCT CTGAGCCAT GCTGAAGTGT GGAATTTAAT TAAA

SEQ ID NO:580: (Length of Sequence = 396 Nucleotides)

CAGAATAAAC ATTACTATT AGGAGAGTCA AATCATTTAT TTTCACATGA AAGAGATTAA GTAAAGCAGA ATCTTTGATG
 GTCGCTGTG AATCTTCCG AGTGATTGAG AAATTCTGA AAACCACTTC CAAATCAATT ATAATATTAA GTAAACTTTG
 GCTTTAGGAG TAAGAGAGAG AAGGTCTGG TCCATGTTGG GAAAGAATAG ATATGCCAC AATAATTAGT CTATTACTTG
 TTTGAAAAGG GTGATTTCT CTGATTTCA AAGTATTAG CAAATAAGGA CATATTGAGT ATGTAATTCA TGGAAAANTA
 AGNAACTTCT TACAGTATGA TTCTAAAGG ATTATGGATG CCATTATCCA TTTTGGAGTT GGTATTGAAG CTATC

SEQ ID NO:581: (Length of Sequence = 449 Nucleotides)

CTGCTCGTG GCTGTTTCAA AGACTGGGCG AAAGGCTGTC CGGAGGGCAG ACCAGGTGCC TTGCCGAGA GAAACACCA
 NAGTCTCTG TTGCTCATA AAGAAGTTTT TGGGATGGGA GAGAATCCAG ACCATCTTGG GGCAGCCAG CCTTGCTT
 CATTTTACA GAGGTAGCAC AATTGATTCC AACACAAAC TCCTTCCCT TTTTAAAATG ATTCTGTTC TAATGCCATA
 GATCAAAGGC CTCAGAAACC ATTGTGTGTT TCCTCTTGA AGCAATGACA AGCACTTTAC TTTACGGTG GTTTTTGTTT
 TTNCITATTG CTGTGGAACC TCTTTTGGAG GACGTAAAG GCGTGTTTA CTGTTTTTT TAAGAGTGTG TGATGTGTGT
 TTTGTAGGAT TCTTGACAGT GCTGTAATAC AGACGGCAAT GCAATAGCC

SEQ ID NO:582: (Length of Sequence = 261 Nucleotides)

CCAGCAGGTC GTACTGTCAG TGGCAGGTC CCGACAGGG CCGCTCAGT GTGCTGAGCT TGGTGGCGGG CACTGGCTTG
 GACAGTGGCA TGACCCGAGG GAAGTGGCG CCGAGGGCT TCAGGGGCT GAGCAGTCC TTGCAGAGG GCGGGAACGG

202

AGGAAAGCAG GGGTCTCAAT TCTGTACGAA AGAGGAGGGT GTTTTACTTC CTGGAATTAT AGAGGCCAGA GGTGTCTCTT
 TTTCAATTTA TTGGGAAGGT TTATTTTAAT ATGGACTTAG AAATAAATAA CTTATTAAAG TGAAGGTTCA CCTGGAGCCT
 TAGGCTGGCT GCTAAGTGTG AGTCTGGGCT GTTGAAGGGA CTGTCCTGTT CTTCTGGGTC TCTGTAGGAG TTTGAAGGAG
 AAGACTGGCC CCAAAGGGTG TTTGAACAGG TTAGATGTGC CCATTGGTTA GAACTTACTT GGATAGGGAG AAGGNTCTA
 GGGCGTATCC ACAAACTT

SEQ ID NO:572: (Length of Sequence = 375 Nucleotides)

CTATTTCCAG AAGTGACAGC ACAAGTCTGA GTTGCTGTTT GGTCTGGTGA CCTCAGACAC ACTAATTTGA ATTGAAAGCT
 AAGAGTAAAA ATTTCCTGGT TACAGGCGAG TCATCTCTTT GCAAGTAGTT AGCAAAGGGA GGCCCAAATT CTCAGGTTG
 TTGATGGGGA ACTTGCCACT AAGAGAAGGC AGAGAGGTCC CTAGTGGGTA TATTTCTGTC CAAGCCACTT GCCAAAGAAG
 AGGAACCACA GAAAGAGAGA CATCATGACC NGGAGAAAAA TGTGACTAGA CATGCTAACC TCCAGGTTT TATATATGAC
 TTGAGTCTGC TGTAAITGGC AGCAGAAATC CAAAATTGT ATGGGTAGAC CACAA

SEQ ID NO:573: (Length of Sequence = 396 Nucleotides)

GAATCCCCAA AGGAGAGGAG CTAACCTATG ACTATCAGTT TGATTTTINAG GACGATCAGC ACAAGATCCC CTGCCACTGT
 GGAGCCTGGA ATTGTGGAA ATGGATGAAC TAAGAAGCTT TGAGGCTACC AGGCAGGGGA GTCCCCCTAC CCACAANCTC
 TTCCCTGAAA GNAATNGAGG GGAAGAGAG GTAGCAGCCA GAGCCAGGAC CCAGGTTTGG GGCTGCCGGC TGACCCGGAG
 CCGCTGGAGC AGGAGGCTGG GGCAGAGGGC CCTAGGCCAA GCCCACCTG GGCACAGGG ACAATCCTCT TCCCCACCAC
 CGGCCCTCAG GCTGGCATCT CTGCCCCAG CTTCAGGAG GGGCCAGACA GAAGCAGCCA TTTGGCATCT CAGGTT

SEQ ID NO:574: (Length of Sequence = 373 Nucleotides)

CTAAACAGAT TTAACCTCCT CCCAGCAATC CAGATTAAAT TAATATGCTT TCTTAACGGC ATTCCGCATT TTTTATTAA
 GCAATGAAC GTCCATCCTT CTCTGATAAA TTAGGGCAAA AAAATTCATA TGTTTAGGGC ATAGGGAAGG AGGAGTTGTT
 GGCTGTAAAA AAAAAGAACA AAAAAAGTA CCGCAATGG CGTTTCAAAG TCTAGACATC TTCAATCA CAACAAACAT
 TCCTCTTAC AAAGGGACCT CAAGTAACCT TAGGCTGGAG GACCCACCTG CGTATGTTTT TTTTCTCAT TTTCTTTAC
 CTTCCTCCA GGCCACCAA CCCACATCA GTGGCCCAAG TCAGTGGGG TTT

SEQ ID NO:575: (Length of Sequence = 431 Nucleotides)

GGCCCCATTA CTTCTTTTCG TGCTACCACA ACAAGGATA TTAGCCCTTG AAATTAAAGA TGTGCTGTC CCAGTTGTGC
 TTGCTTCAC CTAATGTCAT ACAGTCATAT TCCAAAGAC TATATATTAG TGATATCTAT ATAGTTCACC CTTTATATAC
 ATGAGCTCCC GTGTGTGGAG TGAATAATT GCAGATATAA AATATTGGG AAAAAATTC ATGTGTACTG AACATGTATA
 GACTTTTTTN CTGTATTCA TTCTCTAAAT AATACAGAA AATAACCACT GTTTACATAG CATTACATT GTGTAGGTA
 TTATAAATAA TCTGTACATA ATTTAACTG TACAGGAGAA TATGGCATAA GNCATATGTG GATACCACAC CATTATATAT
 CAAGTACTTG AGGCCTCTGC AGATTGTGGT G

SEQ ID NO:576: (Length of Sequence = 410 Nucleotides)

GATGCAACA GCCCCAAGGA GGGAGGTGGA AAGGCCAAGG GGCTTGCCCT CTTGCAAGCG CGCCTGTAAA CAAGTCCCCG
 TGGGGTTTTG GGAGGTGCGC CCACATCTAA GACTGTGCGC CTTGCACTCC CTCTGGATGG CTTCGGAAT TTGGTCTTCG
 CTGATCACC AATTCTGGAAG GGTGGAGAGA CAGTTGGCTG GACAGCTGCC TGATTGGCC ATGACCTTC ACGGTGTCT
 GTGGGCCAAC ACCAAACGCC AGCCTGCTCT GCTGGCAGGG CTCTACCTG CACAGTCCCT AGGGCTGCAA GAGCAAATGG
 GGACCTTGGC TNCGGTCTCT TNCAGGGCC TTGGTCAATG ACATCACCAC TTTCTTAGGA CAGCGTCTTG GGGAGCTACC
 GGAACTTTCG

201

TTGCATTAA TTATGTGAT TTTCCTTTCT ACCCCTTGCT TAGCTAAAAA TATACCCCTT CTNIGTCCAT GGACAGGAGG
ATGGG

SEQ ID NO:565: (Length of Sequence = 196 Nucleotides)

CATCCACATC AGGCAAAGGC AAAGCAGGAC CTGAACCTCC CACCCCAAGC CCTACATCCA TGCAAGCCAG ACCAGACTGG
GTCAGAGGCT AGAAGGGGTC TCACAGGTT GCCTGGGGAA GCCTGGGCC AAAACCTGGC CCTNGCTCCA GCCCAGAGNA
CCCACCTGGG CATNAGACTT GCGGCAGCGT AGGGGT

SEQ ID NO:566: (Length of Sequence = 275 Nucleotides)

TIGGAAAAAA GAGAAAAAAA AATTCTGCTT CATTACGAA TGTGCCC AAA GGAGGCAAGT TTCAACTGA AAACAAAACA
TAAAGTCTA TGTGGATGCA GCCAAATGTT TCTCCATTGA GAAATCATC ATAAAAGGTG GCAGCACTTT TTTTGCTTGT
TAACATATTT ACTTATAACT GGCTGCACCA ACATTTTCATC TCAATTTTGT GAGTGTCTCT TCTGATCAAT CCTAAAAGCA
ACACAATCAT TTTAGAGGTT GCAGACTACA ACAGC

SEQ ID NO:567: (Length of Sequence = 349 Nucleotides)

CGCTCGINTG TCCCACACAA ATGTTTAAAG AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCGTGGCACA
AAAGATTCCA GTGCCCTGTA AGAGGCTCCC TTCTCTCTGT GGGCTCTCT AGAAAACCAG CGGACGGCC TCCCTGCTGA
TACCGTCTAT AACCTTAGGG GGNCTCGGG CAGGCAACT CATCTGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC
AATGCCACAC CTACTGGTTA CCGTTTGAGG GCATTTCTCC AGACAGAAGC CCGTTGAAGC CTAGGTAGGG CAGGATCAGA
GATACAACCC GTGTTTGTCT CGAAGGGCT

SEQ ID NO:568: (Length of Sequence = 368 Nucleotides)

CTGGTAACTT CCGATTGGN TTTCCTCGCC TCANCCCTTT CCGAGGGCTA TTCTCTCTCC ACCTGCTGCC AGGCTTTTCC
CTGGCCATCC TGTGTAAAT GTATCCCGC CCTACTGTT ATGTTCTCCA CAGCACTGA ACAAGACCA ACATGCCCTT
TCATCTAAG GTTTATCTTT CTATTAGTTT TCCAGAGTC TGCTTCCCTA GTGTCCATCT CCGCTGCTCG AATGCCCTTT
GAGAGCCAGT GCTTGATTT TGGTCCNGT GGTATGGGC TGGCACATAG TAGGCAGTCA GCAGATATTT ATGGAACAAA
CAATGAATT TGTGTGACTA TAGTTCAATG TTCATAGTTC ATTCATAG

SEQ ID NO:569: (Length of Sequence = 328 Nucleotides)

TGTCATTAA TGCACAGCTG GGGCTCAGGA CACAGCTTTG CACACCCTAA GTNCTCAATA AATGCTAGCT CAGGGCAGAG
CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCTTAA GTACTCAATA AATGCTAGCT
CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCTTAA GTGCTCAATA
AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGNG ACAGAGCTTT GCATACCTA
AGGTGCTC

SEQ ID NO:570: (Length of Sequence = 313 Nucleotides)

CCCTAAAGG CAGAGTGTCT TCTTACCTCC ACACAACCAC GCTAGCTCTA TAGCAGTGGT TCTTAACCAG ATGAAATGG
CTGAAATGAC AGACATATAT TTCAGAACCT GGATGGGAAG AAAGCTCAAT GAGATAGAGG AGAAGGTTGA AACGCATCCA
AGTAAAGCAG TAAATGATC CAAGAGTTGA AAGATGACTT AGCCATTTTA AGAAAGAACC AAACAGAACT TCTGGAAATA
AAAAAAATC ACTACAGGAA TTTTATAATG CAATGGAAG CATAAATAAC AAAATAAACC AATCTGAGGG AAA

SEQ ID NO:571: (Length of Sequence = 338 Nucleotides)

200

SEQ ID NO:558: (Length of Sequence = 279 Nucleotides)

GGGCCAGGCG CTGTGGCTCA CGCCTGTAAT CCTAGCACIT TGGGAGGCCA AGGTGGGCAG ATCACCTGAG ATCAGGAGTT
 CAAGACCAGC CTGGCCATGT TGAAACCCCA TCTTTACTTG TAATACAAA ATTAGCTGGG CGTGGTGGTG TGCGCTATA
 ATCCAGCTG CTGGGAGGC TGAGACAGGA GAACCTCTTG AACCCGGGAG GCAGAGGTTN CAGTGAGCCA AGACTGCACC
 ACTGCATTCC AGCCTGGGCG ACAGAGTGAA ACTGTGTCT

SEQ ID NO:559: (Length of Sequence = 278 Nucleotides)

GAGAAAGCCA AGAGCCATCT GGAGGTGCCG CTGGAGGAGA ACGTGAACCG CCGCNTGCTG GAGGAGGGCA GCGTGGAGGC
 GCGCACCATC GAGGACGCCA TTGCAGTGT CAGCGTGGCG GAGGAGGGCG CCGACCGSCA CCCAGAAAGA CGCATGCGGG
 CAGCCTTCAC AGCCTTTNAG GAAGCCAGC TGCCGCGGCT CAAACAAGAG AACCCCAACA TGCGGCTNVC GCAGCTGAAA
 CAGCTCTTCA AGAAGGAGTG GCTCGCTCT CCTGACAA

SEQ ID NO:560: (Length of Sequence = 304 Nucleotides)

CAAATGTTAT TGGAGTTAT CTAGAAGGCT CAGTAACCAG AACITCCTTT CATTCTGCTT TTCTTTTCT TTTTTTTTTT
 CTTCTGAGAC AGTCTGGCTC TGCTCTCCAG GCTGGAGTGC AATGGTGTA TCTCAGCTCA TTGCAACCTC TGCTGCCCGG
 GTTTGTGCAA TTCTCTGCC TCAGCCTCCC GAGTAGCGGG ATTACAGGCA CGTGCCACCA CACCTGGCTA ATTTTTTTTT
 TTTTTTTTTT TTGTATTTTT AGTAGAGCCG GGGTTTTCAC CATGTTGGCC AGGCTAGTTT CAAA

SEQ ID NO:561: (Length of Sequence = 323 Nucleotides)

GATGGTAAAC ATAAACCCAA ATATATCTGT AATTACATTA AGTGCAAGTG AACCAAAACA GTTCAGATAA AAGACAGTAC
 CTATTCATA GCATTATGAC TATCATGAGG TAATATATGT AGAGATTAGA GTACACATGT CATATTAGGA GGTGTGCAAT
 AAATGATACT TTATCTGAA GATTAACATA ATTCATACTT AAAAGGATCA AGAACTAGAA TATTAAAAA NTAGAATGTG
 AATGTTCTG CAAGTTTGA TAAGAACAAG CCCATAAATT AATCTCTAAT TTGCTACATT TAGGGAATAT GGGTAATGAC
 TAC

SEQ ID NO:562: (Length of Sequence = 214 Nucleotides)

TCTAATNAGG CCCTGCGTGC TGTGTCATCC CATGGCGGAA GAAGGAAGGG CAAGAGTGGG TGAGATTGTN AGCAGGAGAG
 AAGGCTGAAC TTCATATTTT AACAAACCCAC TTTCAATGAT AINATAATCT TCGCATTTAT TTTTTTCGGT CTCCTCATGT
 NCTCTAATTT TTCTCTGGGN TTTTGGTCTT TTGCTTCTTC ATTTTATAGAA GCTC

SEQ ID NO:563: (Length of Sequence = 358 Nucleotides)

TTTTTTTGT GAGAAACAGA AGCTGAATAT CCTGATTGTA TTGCCACAC AGGCGTTCAA TGGCTTAGCA GTGCTAAGA
 TTTATTTTA TTTTTTTGGG CTCTGGGCTG ACATTGGAAA TTTTNTGAA TGAGAAAAAC CATCTCAAC CACTGTTTTT
 TAACACTGAG TAACTTTGA AATTAACTTT TGCCACAGAC TTGAAAATGT TTCTTAATGA ATTTGACCTG AAATTACAAG
 GTACAACAAC ATAATATGGT AAATTCATTT CAATAAAAAC TAAACTTAA GATTGTCAAG CTGCTTTATA TACTTNTGT
 GCTATGAGAA GTCAAAACAG CGCTGTATTG CCAATCC

SEQ ID NO:564: (Length of Sequence = 405 Nucleotides)

ATGTACTGTG TGTTTCATAC ACATGTTTCC TTAGTCTTA AAATCTGGCT CATGGGGTAA AACTATTAT AATCTCCATC
 CTCCAGATGA GGAAAGTGAG ACTTAGAGGT TAAGTACATT TTAGGATAAA GTAGGGTATT TCGATAAATG TTTCAAATGT
 GTTCTGGTC TCTGAGGACT AACTCCAG GCTGCTGGG ATACAAATA CCTTCTTT ACCATAGGAG CACTTGGGTA
 GAATATTTGC AGAAACAATA AACTGGCTGA TATTTAAAGT TCTCTCAGC TCTGACATTC TATAATTTCA TTGACCCTCT

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GCTGTGTCTAG GGCTGCCATG GGCAGGGCCG TGCTGGCTCC CTGGCCCACT GGGAGGAGGG TCTTCCATGG GGACGGACTT
CAGCTGAGAG CCATGCCCTG GGAAATGTAC CTTTGGGGTC CACATGTTGG AAGATGGGGT GCTGTGAAGG CCACACC

SEQ ID NO:552: (Length of Sequence = 334 Nucleotides)

ACAAACTGAC AAGAGAAAAC AAAGAATTCT TTGGTGATCT GGACACGCTG ATGGGGCCTC TGACCCAGCA CAGCAGCATG
ACCAATCTTG TCCGCTACGT TCGCCAAGGA CTGINTTGGC TGCGCATOGA TGCCCACTTG TTGTAGTGGG TGTTCTCAGA
TCTCTAGCAT CACGACCCAT CACTCTACCT CTACCAGCGC ACTGATGGTC ACTGGTGGAA CTCCACTCAC TGGGGAACGT
TCTCTTTGGT TATGTTTGIT TTTATGCTTC TTTGTTATC TGTAAAAAAC AGAAGTCATT GTAAGTTGAC ACTACAACCT
AAGGGCAGTG TACG

SEQ ID NO:553: (Length of Sequence = 371 Nucleotides)

GAAAAGGGGA AAAATCACA TATGTGTTCT AGACAATATT GGTITAGATT TTTTAAAGAT CTAAAATTCA ATTATGGAAA
GCCAGCAGCC TGATCCAGTT ACTGTGACTA AAGCAATTGT CAGACCATCT CTAGTCAACC CCTTATGGGT TTTGCAATGT
GTCTACCCCA ATTTTGGATC AGGAGGGGTC AAACAGAAAT ACAGCAATGT GATTAACTG CTCTTTTGCA AACAATATGA
AAAGGTTTGT NCTTTCAAAG TAGATTCTAA CAAATCGTCT GCTCACTGTG GGGTAGCAAA GNGAGAAAAG CAAATCTTTC
TATTAGTCTC AAGCAAGTCT TCAGATTTAC ACACAATCTA ATGGAGGCAT C

SEQ ID NO:554: (Length of Sequence = 331 Nucleotides)

TTATGACTTT TTTCAATAAG GCTATTGTAT CAGCCTGINC TCTCGTCT AATAACGACA TACCAAGAC TGGGTAAATTT
ATAAAGGAAA GAGGTTTAT GGACTCACAG TTCCACATGG CTGGGGAGGT CTCACAATCA TGGCGGGAGG CAAAGGAGAA
GCAGATCAC ATCTTACATG GCAGTAGGCA AGAAGAGCAT GTGCAGGGGA ACTCCCTTT ATAAAACCAT CAGATCTAGT
GAGATTTATT CACTATCAAT GAGAGGCAGC ATGGGAAAAA CCTGCCCTC ATGATTCAAT TACTTCCCAT TAGGTCCCTN
CCACAATACA T

SEQ ID NO:555: (Length of Sequence = 305 Nucleotides)

GCTGGGACTA CAGGCGCCCG CCACCACGCC CGGCTAATTT TTTGTATTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC
AGGATGGTCT CGATTTCCIG ACCTCATGAT CTGCCCGCCT CGACCTCCCA AAGTGCTGGG ATTACAGGCG TGAGCACCGC
GCCAGCCCA ACACATGGTA TTTCTGTCA TTTTCATTTA GTCTTCTGGT TGCTGTGTA TGGTCTCAGG CTTTATTTAC
ATTTCTCCGA TTACTAACAG ACTTGAACAT TTCAGCACAC TTTTLAGGTT ATTGAATAAC CCTA

SEQ ID NO:556: (Length of Sequence = 318 Nucleotides)

CTTTTGGT GATINCTAAG CTCGTITTIN CTATCCTAT ATATATATGT GGTGGTTTT NATTTTAGGA TTTTAAGGTT
ATCCCTAATA AATTTTGAGA TGTGTCCAT AGCTAGCCTG TTGAGATCT TTNATATCAA AAGTTAATAT CTGTGGATTT
NTAATCATTC TTTCTACATA TTTAACAAAG TCATTAGCAA AATATTGAAC AAAACCTGTT ATTCATATCC TTAGATACAG
AACATCAATA TCCTGAGATA CAGTACATCA TCAAAATGTG GTCCCAAT GNGCAGCAAT TAGCATCATG TGGGAGCT

SEQ ID NO:557: (Length of Sequence = 349 Nucleotides)

GGAAGCAATG TGCTTCTTCT TAACAGAGAT ACTGCACTAT TCTCTATGTA TACTCACTTG ATGGCATGGT ACATGTCCTC
CAGGATGTCT TGCTCAAAGT CCTTGCTCC ATTCACACCT TTCAGATTTT TGCGAACTC CTAGAGACAG GCCAGTAAGT
TTTTTCCCT TGTGTCAACA CTGAAGCCCC ACCTAAGGAA CTCTGGGTT TTCAGTAAAT AGGACTTAGG AAAAGGTAAG
CGAAAAAACC CACTTCCCA CCCCAGTCCC TTTCTAGGT TIGGGCCAGC CCTTCCTTGA TTCCCTTGGA CAGAACCCCA
TCCATCATGC CCACTGGAAT CCTATGTCC

SEQ ID NO:545: (Length of Sequence = 342 Nucleotides)

GGGCTATTAC CTCGGGCAC TGGGAAACT GGGAGACGGG ACAAGGGGTG ACCAATTTTT CAGTGTATGC CCTTTTCGAA
 GTGTAAACT TTTTTTTTTT TTTTTTGAGA CAGGNTCTCA CTCGTGGCC CTGCTGGAGT GCAATGGTGA GATCGTAACT
 CACTAAAGCC TCAACTTCTT CGGCTCAAGC AATCCTCTCA CCTCAGCCTC CTGAGAAGCT GGGACTACAA GTNTGTGCCA
 CCATACCTGG NTAATNITA AAGTTTTTGT AAAGATGGGG GTTTTCCGAT GTTGCCCAAG CTAGTCTCAA ACTNCTGGGC
 TCAAGTGATT TGCCACCTT GG

SEQ ID NO:546: (Length of Sequence = 280 Nucleotides)

CTCGTAATGC CAGCATTITG GGAGGCTTGA GCGGGGAGGN TCCCTTGAGC CGAGGAGTTC GAGATCAGCC TATGCAACAC
 AGTGAGACCC CTATNCTAT TTNATTAAA AAAAAAAGG AGGGGGTTC ACGTTTACTG CCACCATCCC AGGCAGAAAG
 ATGAAGCCTA GAGCCTCTCA CTGCTTCTTA GTGGGTCTTG GGTGTAAAT TGCTGTCTTG GGTATATTTT TTGGCAGAAA
 GCATCTGGCA TCAGGCACTG GTTCTCAAAG TGGGGCCCC

SEQ ID NO:547: (Length of Sequence = 298 Nucleotides)

CTAAAGAGTT TCACATAGTG GCTCAGTCCA GCCTTGTTGG GATCTTGCCG GGGCTGGGG CCGTGGTCC GGGCCTAGG
 GGGATGCCIN ACCAACAGAG GCTCTNCAGG CTCTGAAGAT AAGCTGAGGG CAACAGTGA CAGAGGGGGC TGAACCTGCC
 TCAAGGAGGC TCTTATTCAA GAGCAAGTCT TGCTGGCTTC TNCAGAGGCT GGGGACCACG TGGCCCTTTG GCCAGCCAGG
 ACCAGCAGCN CTNACCACCT GCTGAGGGGC AGTTTGGGTG AGGGGGGCA CATAGAGG

SEQ ID NO:548: (Length of Sequence = 311 Nucleotides)

GAGACAGGGC TGTTTCTGC ACTACCTGG TCATCTGACC AGCTTTCTGC AATGCTAAGA AGGTATTCTT TGACCAAACA
 GCACTCCACA TACAAGTTTA AAAGGGGCCC TGTTTATGTA GGAACAACAC TGAGGTGGTG CGTAGCAGGT ACAAGACGCC
 CAAATATTTT CAGTTTATCT TACGGCTGGA CTCTATTCT CCCACACTGT TTCTAAAGA AGGTCCACAT TATTTTGGNT
 ACTAGCCTAG TTTAAGTGA GATACTGTGG GCAACTTNA AGAAATGACA TCAGGCACAC AGGCTGAGCT T

SEQ ID NO:549: (Length of Sequence = 387 Nucleotides)

TTTATTTTGG TGTAAGACA GGAAGCTGGA AAATACACTG TATTTAAAT TTNCTTGGTT CCCCCCACA TTGTGGAAAC
 CCCCCCCCC CAGAGCTAAT CTGTTCAAAC TCAAATACIT AAAAAATTACA GCAGCCAAAC AAAAGCATGG GGGAAAAAAA
 AACAAAAACA AAAACCAGAT GGAGAAGTA GCCTGGGCCA GTAGTGTAC TTGGTGTGA CAGCTGAGGT GCTGAACAGG
 AGCTTCTGTT TCTGTTTTT TCTTTCTTT CTTCTTTCT CTTCAGAGAG GGGATCTINGA AGTAGCTGGG TGTGTCCAGT
 TTCATGAAGG CTGCTTCAAT AGCTTGGCTG AAGGAATTTT GAAAACTING CACAGGAACA CGGGTTT

SEQ ID NO:550: (Length of Sequence = 377 Nucleotides)

CACCCCAAC TCTTACCAA GTAGGGGCCC TGGCTTGCAA TTGCAGAAGA GCTTTCCCAT CCTGGGTGA GCATACCTAC
 TGGTAGTGGC TCCGTGATTC CTTGGGGAGG GGCTCCAGA GGTAAACCAAC CAACCTGTG CTACTGCTAT GACCACAGT
 CTGCTTCTGC TGCCCTCAA CTGGGGAAGA AACAAAGAGC CTGAGGGCTT TACTCAGCT TCTAGCACTA CGCAGTACC
 ATATAAGAG GAGCCCACTC TCTTCTCTT GTGAACCTT GACCCCAAC TCTTACCAA GTGGGGCCCC CAGCTTGGGC
 CAGCAGACA GTGGCCCAA CCCCTAGGCT GAACATTCCA GTAGCAGCTG CTCGCG

SEQ ID NO:551: (Length of Sequence = 320 Nucleotides)

GAGTTTINIGG TGAGCCGAGA TCAGCCATT GCACTCCAGC CTGAGCAATC AGAACGGTCC GGCTCCTGTT GCTGAGGAAG
 CAGCTCTGGA TGACCTTCAT GATGAAATTT GCAGCCTCGC GCTCAGTCAT GTTGGGGCTA AACCTGTGCC TGGAGGAGAG

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CATGTCATAG TGGCCTGCTC TCCTAACACA GCACAATTTA GGGCATATTT TCATGATGGT CTATCACTGG ATTACAACAC
 ATCTCTTCAT TAAAGTCTTG GGAAAGAGGC TTCAACTTIN CTGTGTGAG AAAACTTCAC AGGTGTGTAA AGTTTGATCA
 GTATGTATAA TATATTINAT TACATATATT TNATTTINAT TTTTCATTTT TTTGCATACA TAGCAGGTGT ATATACTTAT
 GGGTTATATG AGATATTTTG ATAAAGGCAT GCAATGTGTA ATAATCAGAT CAGGGTAAAT GCAGTATCTA TCCATCACCC
 CAAGCATTTA TCCTTTGIGT TACATACAGT CCAATTACAC TC

SEQ ID NO:540: (Length of Sequence = 416 Nucleotides)

CACCAGGGAG AACCAATACA ACAGAAAAA AGCAGAGAAC AGCTATGTGT CCTGCCAGGT CTACCAAAGA TAGTCATCCA
 AACATGAACA GATGAGAAGG CTGTTTTTCA AGAAGGTGAA AGTGACAGAN TATTCAATGA ATCTGAACAC ATGAAGATAC
 TGAGACACCA GTAGTTTCAGC AATAAGTGGG GAGAAAACTA AGCAAATGAG AAACCTTAGGA ACAATTATGC AGCAAAGAAC
 AACTGGATAA GCTGAAAAGT GTTTAAAGAT GCTGCCGTAA ACACTAAGTA TCACAATCAA ATTCGTATTT GTAAAAATAG
 AGGTATGGGA AGGGTACANG TATGTTTGIG GGGCAAAATG GTGAGGAGAG CTTAAACCCCT CTCTCTCCTT AATGAGGAAT
 TAAATAATCC CATTAA

SEQ ID NO:541: (Length of Sequence = 341 Nucleotides)

GAAATACTTC CAGGCCTTCG AAAGGCCATC CTTTGACAC ATGTAAAAAG CTGTCTTGTT GGCCCGTTAT TCCACTGAC
 CGCTCTGAGT GATCACCAG GAGCGGGCG GCAGCAAGCA GAGCTACCG GATTTGGGAC AAGGATTTTA AAGGCAGCTA
 CAAGCTGAG CTCATTTTGC TGATGATAGT CTCGTTCAG CTGTTTAAA TGACTGTCTG ACTCACCATG GTAATTTTNC
 ACAAAATAAA AACACATTTT GGGTTGTGCA ACAGTGGTTC TCATCTTCC AGGCAGGCAG ATTATTTTAA TGCTGTTTAT
 ACAGGGAATT GGGACTCTCG G

SEQ ID NO:542: (Length of Sequence = 334 Nucleotides)

TTGTGTTC CTACCTTAAC CAATACCTCC TGGAAAAAG AGGTATGGT ATAAAAATA ACCATACCCA AACATTCCCA
 CAACATGACC TTAATAAGCT GGTCACAGT AGATTATGGC AGAGGAAAGA AAATTGACTT TAGAATTAGA GAAACTTAGG
 TTCAAAATCTC AGCTCTGTCA TGCTTTGGTT GACCTTCAGT AAGTCCATT TNCTTCATCT GTAAAATGGG AATAACATCT
 ACTCCACAGC ATCATTAGAA AGATTAAATA GTGGCTGGGC ATGGTGGCTC ATGNCCTGTA TCCAGCACT TTTGGGGAGG
 CTGAGGTGGG GCGG

SEQ ID NO:543: (Length of Sequence = 350 Nucleotides)

ATTTGTTTGC AATGACAAC ACCTCATTAA TTGTAAGCCC AGTGACACTG CTGCTGTITT CAAGTCACIT TTAATTACA
 CACGTGCTAC TTAATCTTAA AAGCAAAATT AAACATTGGA CTGGTTTACA TTTCAAGCTA CAATATGGAA CCATTGTATT
 TGGAGGAATG AGTTAATAT GCATTGTAAA ATAAATTAG GGGGTACTTT GCATTACAG CGGCTTATGT AATTAGGTTT
 AGTCAACTGT AATGTTTCAG GTTAATGTCT TCCATGGATG TATGCTGTGT AAATAGTGAA CTTACATATC CCTAATACA
 TCTGAATTAT TACATAAATC CTTAATATTA

SEQ ID NO:544: (Length of Sequence = 328 Nucleotides)

GGGAGACGAG AACTCTTGAG ATCOGGGGTC ACCTGTNAGT CGCTGGACCC AAGGGGGAAG CGTCTTGATT CCTGGAGGAA
 ATCTCOGAAG TGATGTGTAA CCCTGTGTGT CGCCTGCACT TCGGCCGCAA CTGCCCTTGG TTCAGTCCCC TGTTCTGTGA
 GGAGCGGGG ATCATGTAA AGTGGAGCAC ATCGTCCCG GCTTGGACGC CTTTACCTT TAAGTGTTC TGATTAGTTT
 TGGCTTTGGG TCTACCAAGA ATTCTAGTCA GTAACTAGC TTTTAAAGCC AGGTTCTGA ATTTGGTAGG CATGGACACT
 CCCAGTAG

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GTAATTCCAT GTGGCTGACT GGGTAACAGA TTTGAAGGGT ATCACAGACC TTCATGTTGT AGTCATCGC AGTGTATTGT
 TTGTTGCTTG TCTCTGTCTC CCGTTGTATT GCCATCCTCA AGGGCAAAGA CTGCATCTTT GTATTCCCAG CTCCTAGGCC
 TGAGTCAGGC ACATAGTAGG AATTCAGAAA GTATGTTTTG GATGTAACAT TCCTCCTTTT TCCITGGACAA AATGGCCTTT
 TGTCGGGTGC ATGTCTCTTT CCATAGAGGA GGGGTTGGGG CAGGATTGTN AGATGACTGT GTTTGAATCT TCAGTTAGCT
 AAGACAAGGA TACGTTNTTT CCATGGTGCA AATCTAAAGG GTTCTAGTGA GGTGGTTC

SEQ ID NO:534: (Length of Sequence = 374 Nucleotides)

TTTTTTTTTT GTCCAAGGTT TATCAAATTA ATTGATTTTG GGGGGCAAGA TAAAAATTTT NATTTGATTA ACTTTCTCTA
 TTGGTTTTTG TTTCAATTT CATTTATTTC TTCTTTTATC TTATAATGT NCTTACATCT GCTTGGTTTG GCGTGGGCAC
 AGGGGCTCAT GCGTGTATC CCACTACTTT GGGAGGCCAA GGTGGGCAGA TCACTTGAGA CCAGGAGTTT GAGACCAGCC
 TGGCCAACAT GGCGAAACCC CGTCTCTGCT AGAAATATAG AAATTGGCCA GGTGTGGTGG CCAGCACCTG TGATCCTAGC
 TACTCGAGAG GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGGCAGAGC TTGC

SEQ ID NO:535: (Length of Sequence = 433 Nucleotides)

TGCCGACTGA TTCCAAGTCC CCAGGAGGCG TGTGAATGCT AATAGATATT TGGGGTTTAT CTACATGGAT AAATCAGAAT
 TGTTAACATT ATTTATAAAG ATAATACCTA CATAATTTTN AAATTCACAA AGATTGTTTG GCTAATGAT TTCTAAATGT
 ATGCAATATA ACATTAGGCG GCTTTTATTA ATTCTATTTA TGTAAATGAA AAGCTCAATT CAGCAAAAAA CAGATCTGAT
 GGGATTGGT TATTCTCTAC CTGATCAGAA CAAAGCCTTA CTTTACATTC CTGACTACCG ATTGGCTGAG GGATTGTCTA
 ATAGAATGGA GCTTTCTTTT GAGCGGTATC CATGTGTACA AAATTGGGCT GCTTTACCTG TGACCCACGG ATGTCTGGAG
 GAGCTTGA AA ATGTAGTCAG CCGTTTCTTT TGG

SEQ ID NO:536: (Length of Sequence = 438 Nucleotides)

GATGAATTAA GAGGGAAATT TATAAAGTAA AATCTTTAGC GCTGTGATC AAAGAGTTC AGGCCGGGCG TGGTGGCTCA
 TGCTGTAAAT CCCAGCACTT TGGGAGGCTG AGGTGGGCAG ATCACGAGGT CAGGAGATCA AGACCATCCT AACACGGTGA
 AACCCCATCT CTAATAAAAA TACAAAAAAT TAGCCGGGCA TGGTGGCAGG TGCTGTAGT CCCAGCTATT TGGGAGGCTG
 AGGCAGAAGA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGCCACCG CGGTGGAGC TCCAGCTTTT
 TTGTTCCCTT TAGTGAGGT TAATTTGAG CTGGCGTAA ATCATGGGTC ATAGCTGTTT TCTGTGTGA AATTGTTATC
 CGNTCACAAT TCCACACAAC ATACGAGCCG GAAAGCAT

SEQ ID NO:537: (Length of Sequence = 316 Nucleotides)

TAGTAGCACT AAAGCCCGT TTTGGTCACA CTCTCACCTA GGTGAGAACC TGACCAAAAA TGTGGAATTA TTAAACAAAA
 TGATGGGAAG CCAATGTTCT GAACTGAGC TCTTGCACTA GGCCCCACA GACCAAAATTA AAATGGAGTC ACTAGTGCTA
 AATGCTTTGG AGTCAACAG AAATGTTAAA GAAGATAGAT CCCAAACAG AGCAGTGTTT TATTTTCTC CAGAAAACAG
 GAGATTCCAG CATAATAAGA AAGTCTCTC TGTGTAAACC CTACAAAAA AGTAACCTGA AGTAACCATT TTTTTT

SEQ ID NO:538: (Length of Sequence = 303 Nucleotides)

ATCTTCATGG GCGTCTAAC TGTAACAAAA ACCCCACAAT TTGAACAGAA GAACAGAAGT ATCTGGTTAC AGAAGTGCAT
 TCATACATTT CACAAATGTT TCAGTATCCT CTCTCCCCG ACCCCAGCAT GAGCTTTAAT TGGATGTATT TATCTTTCA
 CCAGCATGCC CATGAAGNG CTAAGGAAAA CATTTACCA GTCTGTTTCA AAATCTGTCC TTGGCATATC AAATTTTTTC
 TCTTCTTTT TCATGCTTTT TTTTAAAAA AAAAACAGGA GAAAGCGAAT AGAGAGGAAA GAG

SEQ ID NO:539: (Length of Sequence = 362 Nucleotides)

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TTTGAGTTT TACATTCCCC TAGTACATCC CTGCTTACTC GGGAGCACAA AGCTTGGTIG TAAGAAATTG TGATTGGAA
GTAGAGAAAA GCAAGGAAGT CCAACCTCAG GAGTGTCTCT GTTACTAAGA GGAGAGTGAG ATCCAGGGTG TGGGAGATGA
TCTGAAGGTC TATGGGTGGG GAGTGCCACA GGAAGAAGGG TTCTGGTGG AGTTAAAGGA GGATATATCT ATATNCTGGG
AGATGAGCTG AATTGAGAAC ACATGGAATG GGAACAATTC TCCCCTACT GCGTTTAAGC CAAATTAGGC TGGCATCCCC
CACCACGGCC AACTAA

SEQ ID NO:528: (Length of Sequence = 482 Nucleotides)

TTTACTCTA GCGTGAGGAG GGGGCTCCT AAGGAAAGTC ATGCTGGGTA AACTGTGCGA TGTACAGAG CACATTGAGT
CTGTGGTCAT CGTGGTTCCT CTATCTTCAC TGTCACTGT ATCTGTAC ACATACTCAG TTCTAAATTG TAAGCTCAAT
TTTGGTATTA GCAAAAGCAT CTGTAGTTT TTCTCAATT ACTCACCTT CTCTTGCTT AAATAAAACA AAGAAACAA
GAAAACAAGT GTGGTGTCT TACAGTCTC GGGAGTCTT CTTACTGAC TTATATATA TANAANAAG AATGCACATG
CGGGCCACGT TCACAGATAG ACAGATTCAC CCGAAATTGA GGAATGAGGG GCCTTAAAGG CTGCCGANAA NCAAAATGGG
GTGGAAATTA GCAANCGTIG TTTCCGGTC AATTNCCAAT TGTGCACTGG CTGCGTGGAG ACAAGNCCAT CTCCAATT
CC

SEQ ID NO:529: (Length of Sequence = 412 Nucleotides)

CTCTCAGACA GTATCTCCT CGAAGCAGGA ATCCTAGTAA ATCTCATCTG CCGCATGCGA TTCTAGTGC AGAGAGGGGA
CCTGGGTAT TAGAAAGTCC TTCAATATTT AACTTCACTG CAGATCGATT AATTAAATGGT GTCCGGAGTC CACAAACAAG
GCAAGCAGGT CAAACTAGAA CACGGATTC AAACCCCTCA GCATATGCCA AGAGAGAGGC TGGGCTGGG CGTGTGGAGC
CAGGCAGTCT CGAATCTCT CCTGGTTAG GGAGGGGAAG GAAGAATTC TTGGCTACC GGAAGAAAG GGAGGAGAAG
TTTACAAGCA GCCAGACACA GTCTTNCAC GNCACCAAAG CCTCCGTGC CAAGCTTTC AGCTGGGGC TTTCCAGCT
TTCCCTCCAT TA

SEQ ID NO:530: (Length of Sequence = 301 Nucleotides)

ACTTTTAAAT AATAGTCATT TAAAGTGGGT GAGATAATAT CTCATTGTGG TTTTATTTG CATTTCTCTG ATGCTTAGTG
GTGTGAGCA TTGTGNCATA TAACINCIGG CCATTTGAT GTCTTTTTT TTTTTTTTT TTTTTTTGA GATGGAGTCT
CACTTGTCA CCCAGGCTGG AGTGCAGTGG CGCAATCTTG GCTTACTGCA AACTCCACTT TCTGGGTCA AGTGATTCTC
CTGCCCTCAG CTCCCAAGTA GCTGGGATTA CAGGNGCCA CCACCAAGC CAGCTAATTT T

SEQ ID NO:531: (Length of Sequence = 312 Nucleotides)

CAGATGAGAC CAGGCCCTGA CAGTGGGGC AAGTCTTACC AACCTGCACA GCATATCCAG CAGGCAACT GTGGCTCAGC
AGGTGCCAAA TGGAGCCCAT GGGCAGAAGA TGCCACAGC GTTCCAGATG TGTTGGTCT GAGAGATAAA AGGACACAGA
ACAAGATGAC TGTGCAATA GCAAGTGGT GGCAGAAGTT CTGCATTTC AAGAGATGAT CCACTCAATA ATTTGACGAT
ACTAGTTGGC CAACATGCTC AGAGAAAACA GNCCTATCCA CATCTGGAGC CTCATTCTCT CTCAGGATCA TT

SEQ ID NO:532: (Length of Sequence = 313 Nucleotides)

GCACAACTCT CGACCTTTGG GAGCAGCCAG GGAGGAGTCA CTGTCCAGC CCCCTGGCCT AGGCACAAAG GGGTGGGAGA
GACAGCTGGG CCAATATGGT CTATTACCGC CTGAAACCCC GCGAACCAC CCTTAACTCT GCCTTCAGGC ATATCCCCC
ACGTCCATGT CCAGGAGCCC CCTTACTGTC CTGGTCACT GTGGCCCGG GAATAATGGA GGAGATGGTC TGGTCTGTGC
TCGACACCTC AACTCTTTG TGAGTATGTG GGGAGGGGCT GTGGGGGAGG AGGGCGTNAG GGCTCTGGGA TCT

SEQ ID NO:533: (Length of Sequence = 378 Nucleotides)

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CCAAGACTGC TGATCTCTAA ACAAGCATCA AAACCCGAAG CTCATTAACA TCAGAGTGAG CTTCAATAAG GTGANCACTA
CAATGATGTA CAATTACATC CTAATANTTC ANIGCCCCAG AGCCCTGTAG AACTATTGCA AGGCCAGGN TTATCACAGT
ATGCAAATGC ACTAGGAAAA TCATTACCTA TTTAGTCCCC TTTATTTTGG TGGSTTTAAC ATGAGAAGAG TAATCCATGC
TACAAGACGA GATTTTCATT TACAGCTGTA GTAGCCAAGT GCATAAAAGC TTGANTCTGT CCCA

SEQ ID NO:521: (Length of Sequence = 360 Nucleotides)

TTGAGACGGA GCTTTCCCTG TCACCCATGC TGGAGTGAG TGGCGCTATC TCAGCTCACT ACAACCTCCA CCTCCCAGGT
CCAAGTGATT CTCCCGCCTC AGCCTCCCAA GCAGCTGGGA TTACAGGCGT GAGTCACCTG CCTCAGCCTC CCACAGTGCT
GGGATTACAG GTGTGAGCCA CTGCGCCAGG CCTCCCAAGG TGTITGGGATT ACAGGCGTGA GCACCGCTCC GGGCCTCCCA
CAGTGCTAGG ATTACAGGTG TCAGCTGCTG CACCTGGCAA TTTTITGATA TTAGGTCCCC TGAAGTCCAA AAAGAGATAT
ATGGCTTATT TGGTATAATG AAATCATACA GGAAGGCATT

SEQ ID NO:522: (Length of Sequence = 287 Nucleotides)

TTGAGGAAGT TCTGTGCTG GTGAGGAAAT TCINTTGAST TCTGTAGGAA TTTTATAGC TTGTTTIGCA TTCAGTTCTA
TCAACAAGCC AGCAGCAACT CAAAGGGAAG CCTCCTNCTG GCATATCAAT CACACAGGCA CATAGGATCA TATAGCATAT
AGGATCAGTC CCAAGAAGAA CTATNGGGIN GGGGAGAGGT TTTCTTCCA CTCTTGGGN TTCAGTGACT TTGAGATGGA
CCTCTTTTTT CCNNTGGACA AAATGTCATC ACACCAACAT CTTATTG

SEQ ID NO:523: (Length of Sequence = 318 Nucleotides)

CCTGTCTCT ACTAAAAATA CAAAATTAG CCGGGCATGG TGTACGTGT CTGTATCCC AGCTACTCGG GAGGCTGAGG
CAGAAAAATT GCTTGAACCT GGGAGGCAGA GGTTCAGAC AGCTGAGATC ACTCCATTGC ACTCCAGCCT GGGCAACAAG
AGCAAACTT TGTCTACAAG TCCTCTACG CTGACAGGTC CTCACTCACC TGAATCTTT ACGCCAGCAG CGTCTCTTCA
CTGACGINCT TCINCATGCC GGAAATAGGA CCTTCCCTTG CCANCGGGA GTGCTGGCTG CATGCAGTCG TTACTTTT

SEQ ID NO:524: (Length of Sequence = 238 Nucleotides)

ATCTCATTGG AGCCAGGGTT CCAGTTCTCA TGCAAGTGG CCACAGGAGC CACGGAACCG CAGTAGGATT TCTACTGTTA
TACAGCCCTT GAGGCAGAAT GCAGCAGAAG TTGTGGACCT TACCGTTGAT GAAGATGGTA AATTGAAGTA GTAACAGTAG
AAAATTATGA AAGGAGTTTG ATAAAAGGAA ATCTCTTAAT ATGCTAGAAA CTCTCTCTGC TTACTGGTAA TATATTAT

SEQ ID NO:525: (Length of Sequence = 168 Nucleotides)

CCAATGAGTG TGGACCTTAA ATTTAAACAG CTAAAGCTAT AGTCTAAGGA CAGTCTCAA TAAATACCTT TGAATTGTCA
TATGGTCCCC AGGAGGGTCT TGTGGAAGG GTTTCATGGT AGTGAAAGAT GTAATANTC TTTTTCCTT TTAACCCCTAA
GCCTGTCC

SEQ ID NO:526: (Length of Sequence = 387 Nucleotides)

GGAGTCA CA CGGTGAAACA GACACAGTTA TATACAACAG GGCAGGTTTT TAAAAAGAGT TGCTCTCAGA CGCATTTTTT
CTGCTCCCTA AAAAGCCGAG GAAGATACTG GNTCCACAGA AAGAAAAGGC AATGCCGTAA CATGAGGCC TCATGGCCGC
ACCGTCCAGG GGAAGGGCTG TTAATAACAC AAGTATTCTT GTGAAATACT TCGATCTGAG CATTAAGGCA GGTCTGCAGG
AGATCCGTCC TGGGGACTCG GACAGCAACG CTACCGGCTC CGAGAGGACA GTTAAATGTC GCCTCCCGGC AAGAGGGGCG
GAGAGATCAG ACAAGGAGTT GTTCTTGAST TNAACCTGC TACAACAGCA AACTCCAATA AACTCAA

SEQ ID NO:527: (Length of Sequence = 336 Nucleotides)

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TTCCACTGT AAAACCAAAG GCTGCAACTG TGAACAAATG TGGACTTCCT CAAAGGACAA ATGAGGAGAC TGAAGGCTAC
ATTTCTCTCT TTAGAAGACC ATTAGAGAGT GTCTACAGTT ATACAACAGG TTTCTGCAAG ACCCTGTGGG TAACTT

SEQ ID NO:515: (Length of Sequence = 416 Nucleotides)

ACAAAACAAA AAGTAGTAGC ATCTCTGTGA GAGGTACACA GTTAGAAAA TGATTCCACA CACGAGTAAA GAGATTACC
AGGAAGAGTC TTGTTTTCTA AAAGTTGATA CAACTAGTAG AAAATACTT GTCAGTGGTA AATAGAGCAG AAGTAGAAAA
AGCAGTTAAT CTATTAGATC AGATCAGAGT GTAAGGCAGG TATATCAGGC CAAAGGTGAT AAGACAGAGC AGAAATAAAG
TATTGTTAAT TCATGCAITT NCTGACTCAT TTAITTTATAC ATTGATACTG TCACTTATAA ATCAATCTT ACAGGTCAGG
TTCTGTGCTA AGCTCAGGGG NTATAAAANG AAATANGTCA CTGCACTCGC CCTCACGGGG GCCCACCAGT ATAACGGGT
AGATAGTTCT ATAAAG

SEQ ID NO:516: (Length of Sequence = 368 Nucleotides)

CCCATGGAGC TCAGAGACAT CGTAGCGAAC ACGGTGCTAC TCAAGGCCCG GGAAGGTGGC GGTGGAAATC GCAAAGGCAA
AAGCAAGAAA TGGCGGCAGA TGCTCCAGTT CCTCACATC AGCCAGTGGG AAGAGCTGGG GCTCAGCCTC GAGCGTGA
ATCAGAGCCT GTGCGAGCGG CAGCCATTGG GCGCTGCTG TTCGAGAGT TCINTGCCAC GAGGCCGGAG CTNAGCCGCT
GGCTGCGCTT CCTGGATGGG GTGGCCGAGT ATGAAGTGAC CCGGATNAC AAGCGGAAGG CATGTGGGGG GCANTAACCG
CAGAATTTTC TNAGNCACAN GGGTCTGAC CTCATCCCTG AGGTCC

SEQ ID NO:517: (Length of Sequence = 393 Nucleotides)

CCCAGCGCTT GGAGAGCCAG CCCTGCAGGG TGGGTGGGC GAGCCAACT GCGTTCCTGG TGCAGGGCTT CGGGTCTCCC
TAACAGACCT TATACGCTGA CCGCGGCCG CCATGGCAGT GTCTCTTTC TCAGACATCC AGGGAGGACC ACAITGCTCC
AACAGGGTC GCTCCACCAA TCCTGGGAGA AGCGAATGCT TTTCTCCGGG TGCCCTGTCA GCGCTCATG GTGCCAGAG
AGGAATTTTA GTGGCAGCAT TCCTGGCTGC ACNCACCGA AATTNCCAGG CCCTCCAAG TCAGAAGGGA CCACCAGGAA
AAGTCAGGAA GAGAACCACC ATCAAGGTCC CAGGCTCTTT TTTGTGACA AGGACTTAGA GGGGTITGGG TCT

SEQ ID NO:518: (Length of Sequence = 465 Nucleotides)

CCCTCTCTGC AGATAGAAGA GCCAGAATGG GAAAGCGAA GATCCATCAA CCTGTCTGAG CTCATTGATG TTTACAGTGA
TGGTGTGAA CTACTCCAGA TGGTGAAGGC ACCAGATTCC AACTGCAGCA ACCTCTGAT TACAACCAGA CAAAGCCTTG
TNCCTCTCG GGGGCAAAAT CTGACACCTT ACTGGGCATT GAGACTTCAA GGCTGCGCA GCAGCCTACT CCTGGATAIT
TCACTGATGA TCAGACATTA GACTTCCTTC TGCAGATACA GGATGGAGTT GGGATGAAAA AGATGATGGT TGTGGATGGT
GACTCTGGGC TCCATTGTTT GGAGTTACCG TGCTCGTTG TCACATGAAA GAAAACGGCC AGCCACCTCA GCAGTTACTT
TCAGACCAGA AGTCTGTCTT TCCTCTTCTG GGGCCGAAGG CTTGTGAGGT TGCACTTCC CAAT

SEQ ID NO:519: (Length of Sequence = 382 Nucleotides)

GGCGTGGT AACAGAAAAC TCAGTGCATA CTTGTCTGTT GTTAGGTTGT CAATATAGTC TTTCTGTAGG ATGGATAGCA
TGTTTGAGAG GTGCCAAACA AGAAGTTTGG GGGTTAGTAG TGTTCTTGT GGAGGGTATT ACAGGACTGT GTAATTATAG
GACTCTAAT TGACATGGCT TGGCACCAC TTGCAGCTAG TGGGTACAGG GTACAAAAGA TGTTAGAGAA AAGCTCTACA
GATTACGTAC TTTCTGTCT TCGTATGCTC AACACTGTCC TTTGTCTC CATGAAGAT GAAGGAAGCA AATTTATGTA
TGTCCTTTCT TTGACCTTCT TTAATCTCT GATACTTTT AGATTGCATG ATTTTACTAG GC

SEQ ID NO:520: (Length of Sequence = 304 Nucleotides)

SEQ ID NO:509: (Length of Sequence = 370 Nucleotides)

TTTTTGAGAC GGAGTTTCAC TCTGTGTGCC CAGGCTGGAG TGCAATGGCA TGATCTCGGC TCACCGCAAC CTCGGCTCC
 CGGGTTCAAG CGATTCTCCT GCTCAGCCT CCCAAGTAGC TGGGATTACA GGCAAGCGCC ACCACGGCTG GCTGATTTTN
 TATTTTGTAGT AGACACGGGT TTTCACCATG TTGGTCAGGC TGGTCTCAAA CTCGGACCT CAAGTAGTCT GCTGCCTCA
 ACCTCCCAA GTGCTGGGAT TACAGGCGTG AGCACTTGGC CTTGGCCGTG ACTGATTTTT TTTCATGTAG AATGTCAAC
 ACGAGAGATC ACAAGTGGAG CACTTTGAAA GACCGTCGGT TGTGTGCACG

SEQ ID NO:510: (Length of Sequence = 446 Nucleotides)

TCTTCTCTT TACTTTCTT CCTTCCCTCC TTTCATATGA GAGACTCTAT ATGGAAAAGG AAGCTGAAGT GGCTGCACA
 CGATATAGAA AAGCCATATT ACTTCTTAA GACTGGTAAT CCGGCAATAC CTAATGCAGC ACATGGCTAG AGACTCCACA
 TTGCCCCAAC TTCTCTGCTC ATCATTTGCC ACTGTTCTGT AAATTTCCCA GTCCCCCTAC AGAAAGCACA TGGCACCATT
 TAAAATGGCT GCTCACTCTC TAAGGGAGGT CTCACAGGCT GGTAGTGAGC CTTGTCCCAA TAGTGAAGTT CTCACAAAT
 GGGGAGACTT CTCCAGGAG GAGGGGAGGC CTGGAGATGG GCATGCAGTG GGCAATGTCA GCTGCCCTCC AGGTTCTTGC
 TTGCCCTTTT TCCGCCCTGG GTCAGTATAC AAGCTTTCGG GGGACA

SEQ ID NO:511: (Length of Sequence = 354 Nucleotides)

AATACCAAC TGAACAAACC TGCTCTTTC TGGTTAAAC AAAAAAATAA AAACAAAAC AAACAAACA AAAAAATCAC
 ACAGTTTAAT AAAGANGCAA CTCTTCTT TTAGNGCAA GGACTACCA TCTAATCTT ATCTATTGAG CCCCCAAAG
 CTCCTTCAG AGTCTTCTT CTCTTTATCA ACAGAAAAGT CTAGAATGAN TATTCACAGT TTTCTAAGAA AACCAGAAAG
 CCTTTAGCA GCATTAGCTG GNCATATTTT TGCTCTTAT AGTTACCATA GATGAGTACA GCTTTACTT AGGGGGCTGG
 GAGTTCAGAC TCACAGCAGA GACTNCTGGG GTAG

SEQ ID NO:512: (Length of Sequence = 374 Nucleotides)

CATGTATATT ACAAAAAAGT TCCGTACCA AAGTCTTAT TAGACTTTAT TTTGTTTTTT TTAATTTTTT AAATTTTTTT
 TGTTTTTATT TTTATTTTTT AAATTNCTC TCCTGGTGGT GACTGTCTG TGATTGTCTC AGTTCTGGA CCAACAAAC
 AACTAATAA TTTTAATCT GAAACAGTGA TTGTCCCTTT NGGCTCATGT ATGTACAGGG TGATCAGAAG TGTACCTGT
 TAGCAAAAGT GTCACGATGC TGCACCTCTA CCGAACTGA TACCCACGAA CTACGGAATC TAAACAGACT ACACCCTGTA
 ACTGCGTATT ACTGTCCACA ATGGGGATCT CCAAGACAA AAGAGGTATG GAAA

SEQ ID NO:513: (Length of Sequence = 463 Nucleotides)

ATCAGCAGAT TTNCTCTGG TGAATGTCTA ATCAGTGTA TTCCATAGG CTATACCTAC CTTTGGGGG CTACTTGCCA
 ATNATGTTG GTCAGTATCC TTGCAACAA CAGAGTGACA GATCTAATAA ATGACTTTGC AGGCCAGTAC TAAGAAAGAC
 ACCAAGGTTT ATGGGCTTGC AAATAAAAAG TCCATAACTT CCTGCCCTA CTTACCAAG TGAAATCGAG TTCTCACAC
 TTCTGCACAC AGCTCTTCA GGATCTTCCC TTCCCTTCAA GGCTGTCTGA TGTTCAGTTT AATTGATTG TATTGTATA
 AAGTGCTGAG TGTGAGTCC TCAAAGAAAT TTACTTTTCA TCTAANGCCC CCTTGGGACA AGAAAGTGGC AACCAGGCAA
 ATGATTGATT ACTTATTGT TTGAGTATCA CTTTGTGATT GTCCAGGGC TGTATTACAC ATA

SEQ ID NO:514: (Length of Sequence = 396 Nucleotides)

CCAACCCAGA AACGTTTCC TGGCTCTCTA CTAACAGTAA AATGTGCTGA GCCCAAATTT TCTGCTCTAA CATGGGTCCC
 ACGACCTAT CAGTCTGCTC TGGGGTCTG ACCTGCTGGG TCCTGAGCAG GGTCTTTCCC TAAGCATCAC TGTGGGTTTG
 GAGACAGCTG TAATGTGTGC AGCTGTGAGC AGAAAGTACA ATGCCACTGG GCTACATATG TCCATATCAT CCACCACCAT

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SEQ ID NO:503: (Length of Sequence = 446 Nucleotides)

CTACAGTACC CATCTOCCATT TTCAGAGAGC TCCGATGGAA ATTTCTATGA ACTAATTCTC CTGCACATAC TTTGGTACAA
GTGGGCTACT GGAGCCACCT TCCTTCGTTC AATCAAACAG CATTTATTCA GCTTATTTAA TGAACACTAT CCAAGATACT
TGGGGGACAG AAATGAAAAG ATGGGGAGAC CTGTCAAACA TATGGTACTA TGTCTATGCA AAATAACATT GGAATGTAGA
TTCACAGTGG AAGGCAGGGC AGGCATGGAA GAATTCAGAG AATGAGTGTG ACAGCTCCTA CCTGTAAACAG CTCCTCAAGC
TCCTGCTGGA AGCGGTCAGT CAGCAAATCT ACTAGCTGGC TGCGGGCAAA AGTCCGCCCG GCTGGAGGAA AGTGAATTCC
GGGATTTACA GAGCAGGTAG AGGGCATGCG GCGCAGCCCT CAAGCA

SEQ ID NO:504: (Length of Sequence = 248 Nucleotides)

TTGCTCTTCT TTTCTACCAT GGGAACGTCC TTCTCAGGGG ATTTTNAGGT CTCGGTGTTC CTGTGTTTCT NAATAGGCAG
TTTCTGCTG TOGGCTAAGG GCTTATCCAG GNCATATCC AGAGCCCTGT AGGGGTCTGT GGGGTCTTTG TCATCTCTGT
CGTGGGCGAG AGCATTCTCA GGCATCTCCT CTGTACGAT GTCCACCTGC TGGSCAAGGG CGATGTCTTC GTGCTCTCC
GTGGGCAA

SEQ ID NO:505: (Length of Sequence = 367 Nucleotides)

GCTATGTTGC CCAGGCTGTT CTCAAACCTT TGAGCTCAAG CAGTCTCTC ACCGTCTCC CAAAGTNCIG GGATTACAGG
CATGAGCGAC TGTTCTGGGC TTACTAAATT TTAAGAGATT TGTTGTGAAC CATCTGCTGA TCATGGAGCA GCAGAGAAAT
TTATTGACAG ATTTTCTAGG GTCATCACTG ATGACAATCT GNTGCCAGAA CAAGCCTGTA ATGCTGATGA AACATCACTG
TTCGGCATT ATTGCTCCAG AAAGATACTG ACTACAGCTG ATGCAAAGGC CCTGTAGGC AGTAAGGATG CCAAGGACAG
AATAACTGTT CTGGAATGTG CTAATAATGC AGCAGGCATT CAATAAG

SEQ ID NO:506: (Length of Sequence = 419 Nucleotides)

ACACCTGGTG ACTTTAGCTA TGCCATCAAA AAGCCTGAGG AAACAACCAG GTCCCCAGAT GAAGAAGATT ATGACTATGA
GTCCTATGAG AAGACCACCC GGACCTCAGA TGTGGGTGGC TATTACTATG AGAAGATAGA GAGAACCACA AAATCTCCAA
GTGACAGTGG CTACTCTAT GAGACCATG GGAAGACTAC CAAGACCCCT GAAGATGGTG ACTATTCTTA TGAATTTATT
GAGAAGACCA CACGGACCCC TGAAGAGGGT GGGTACTCAT ATGACATAAG TGAAAAGACC ACCAGCCCCC CGAAGTGAAG
TGGTTACAGC TATGAAAAGA CTGAGAGGTC TAGAAGGCTT CTGGGATGAC ATCAGCAATG GCTATGGATG GACTCTAAGG
ATGGTTGGCC ACACAACCTT

SEQ ID NO:507: (Length of Sequence = 417 Nucleotides)

GAAAACATTT TTACTTAAAA AATATTCTAT TACTTCAATG TCATGTCTGT TGAACGAGGA ACTCAACATG CTTATTINCC
TTTGGTTCCA AGAAAAACCC AAGTCTAACC AAATGTATGC CACAAGGAAC TGCCAACCTG GTTAAAGCTT GGTATTTTCC
TGGTTATCAC CCTATTTCTT GGTGTAGGAC CTGGGGTTTA ATAGAGACAT TTACATAAAA AAGGTATTIG GTTAAAACAA
GAAATATGCA TGCNCTTCCT TACCACCTTC CTGGGAAAGA ACTGCTTTTT TTNCITTTCT TCTGTGAATC TTGTTCAAGA
CATCCTGTAG TTTAGATATA TGGGCTGCTT CTTTTTACC CTCAAGCTTT TAGGTGACAC TTATAAAGGT GAGCATATCA
TTCTATAAAA TGAAGA

SEQ ID NO:508: (Length of Sequence = 308 Nucleotides)

CTGTTTAGAA AAAAAAGTGC AGCTCACTGT CAGCACTCAT TGAATTTTGC ATAAACATGC TTTTGGAGGC TGAAGCAAAT
CTGACTGATT TTCAATGTGA AAATAAAATA TAAANCTGT TTTTAGAGTT ATTTATTAAAC AGAACTAACA TCAGAATTAT
TTGAATCACC AGAATAATCA ATTCTGGAAA AATCAGATTG ATCAGATTAA TCTTTGGCCA ACAACTGTTT AAGAACAATG
TTAACATCTG CATGGCAATG CTACATTINC TAGGATTTGA CATTTTCAGC AATTGAGGAA TTACTATA

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GATTATTAA GTATCCCCGA AAATATAAAC ACAAAACAGT AAAAAACAAA ACCGTAAAAC GTCAGGCCTG GAGCTGCAAT
 AAGACAGAGA CAGGAGCAGC TCACACGTGG CCTAGGTGGG GAGGACGAGG CCATAAATAC TGCAGGAGGG CGGCAAGGGA
 GCCCTAGGGC GAGGGGAAAG CAGGGTGTGG GCAGCGAGAT GGNITCCNGG GTTTAGACAC TGCTGGCTTC GGNCCCGGCC
 GGCACCANGA CTCTCACTTC CAGCTGCGAG CAG

SEQ ID NO:498: (Length of Sequence = 319 Nucleotides)

ATTCCCAAAA ATAGAGTCTG GACCTCTTAC CGCTACAAAT TCCAGGTCTT CAGGTACAGC CTGAGAGTAT GCAGATATAA
 TACACCACAG ATGATTCTCT CCGTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTGTAGACA GAATCTCATT CTGTACCCCA
 GGNITGGAGTG CAGTGGGCTG ATCTCGGCTC ANTACTTCTC CCGCTCCNG GNTTCAAGCA ATTCTCTGCT CTNAGCCTCC
 CGAGTAGCTG GGNCTACAGG NGCACACCAC CATGCCATC CAATTTTGGG ATTTTAAGTA TAGTTGGGGT TTCACCATT

SEQ ID NO:499: (Length of Sequence = 408 Nucleotides)

GAGAAATACC TAATGTGAAT GACGAGTTGA TGGGTGCAGC ACACCAACAT GGCACATGTA TACCTATGTA ACAAACCTGC
 ACATGTGTAC ATGTACTCTA GAACTTAAAG TATAATAATA AAAAAAGAGA ACCTTTAAAA AAAAATAGAC TGCCAGATAG
 ACTAATAAAT AAAAAAGAGA GGTGAAATA ATCATAAATG ACTAAGGGGA TGTTACCCCA CAGAACTACA AAAAACAAAC
 AAAAAACCT CAGAGACTAC TAAACACTC CTATGCACAC AAAGTAGAAA ACCTAGAAGA AATGGGTAAA TTTCTGGAAA
 CATACANCCA CCGAAGATTG AACCAGGGAG AGATTAAAGC CCTGAACAGA CTAATAATGG NGTTTCAAAA ATTGAATCAG
 TAATAAAA

SEQ ID NO:500: (Length of Sequence = 474 Nucleotides)

TTTTATTTTT TTCACGTGTA CTGTTTTTNA TCITGTGATT ATAAAAATGA AAATGCCAAA ATGAGGGTTA GCTTAATTTA
 AAGTATAAGC GTAGTTAGCA GCTTTTNTA ATCACTCCTG TCCATTMAA AAATAATCCT CATAGGAGTA TAAACAGAGG
 AAGSAGAAAT GGAGGATGGG CTTAAGAGAA AGAGTATTTT ACAAATGTCT GCATAGCAAA TTCAATTCAT CTACCTAGTA
 GCTCCTCCG TGTTAACCTA CAGGTGTTCT CCGCTCCAAA AAAAAGCATC TTTTAGGAAG AAACCACCTT AACACTACCT
 TTAGANGATT GAACTTCCAG GGATAGGTTG TTTGAGAGAA TCACCAAAAG CCATTTTTTA ATGAATTTTT AAATTACGGC
 TTTCTCATT CTTATAATAG GTTAGCAGCC ACCTTCCCTC TACTATGGAA CTTTAAACCA ATAATCCAAG TCCT

SEQ ID NO:501: (Length of Sequence = 378 Nucleotides)

GTGGTGGGG GCGCCTGACC TCGTGATCCG CCGCCTCAG CCTCCCAAAG TGTGGGATT ACAGGGGTGA GCACCGCACC
 CGGCCCTGT GTACATTTTT ATAAGAGAAT TTTTITAGCT AGGAGTTCAG AATTTTTTAAA GTACCATTGT AATGATCTTA
 ATTTTNCITT CATGACAACA CATTCCAAA TGAATCATGC TTATGTACTA AGAGGGAAAA TGTATTTAAG NTAAGGGTGA
 GAGACTTAAG TTATAGGTGA CCTTAGAGAC CTAAGGTGAG AGACTTGACA CATGGAAGGA GTAACATTAG GGTCTACCTC
 TACCTCAATT TAGTTAGCGA TTTACTACAA TTTAGAGCT AACAAAAGTA AAAATAAA

SEQ ID NO:502: (Length of Sequence = 448 Nucleotides)

TTTGGAGAT GGAGTCTTGC TCTGTGCCC AGGCTGGAGT TCAATGGCAC AAATCGGCT CACTGCAACC TCGCCTCCC
 AGGTTCAAGC AATTTTCTG CCTCAGCCTC CCGAGTAGCT GGAATTACAG GCACAGCCA CCATGCCAG CTAATTTTTG
 TATTTAGTA GAGACGGGG TTTCCCATG TTGGCCAGG TGGTCTCAA CTCTGAACT CAGGTGATCC ACTCCCTCGG
 CCTCCCAAAG GGTGGGATT GCAGCGTGA GCACCACGNC CAGCCATGAT CCTTAACTT GTTTAAGAG GTATAATAAC
 TGGAAATCAT GATGCTCTT AAGGAATACC AATTGGATGT ATTATTGATG TATTTAATTC CATCCATATG NAGTAGAAAC
 AGTTTTCATT AGCAGAAGGC AATTATATTA TAGCTACACA ATATAAAG

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CCTGTAAGTTG TCGTCCCTCA TTCACCTAAT TATGATACTT GCCTGGCATT TTGCAGGTTT CTGATGCTGT TACCCAGTGA
TAGACCAAGT GCAGACAGAA TTTCAATTCT GCTTTATTAA GGCACAGTCT TGAGAAACCC ATTGGCTTCA CACACAATTA
ATTAATTTNT GGCAACAAGC TACTATATIG GCTTGCATGT CACTTTCACC TCTCTGGGCA TTAGTTTNT CTATATTTA
TAAAGAAGG ACATGACTTT CTAAGGTTC TTGCAGTAAT TATGCAGTTC TATTCTAATA GATGCTTAAG CATAAAACCC
ATTTTAATAC TGTCCAAGG ATCCAGG

SEQ ID NO:492: (Length of Sequence = 320 Nucleotides)

GAAATTGGNT CCAAGTTTG GACATGTCAT TTCATTAATA CGTCCCTTAA GTTTATTTTA ATCTGTATTT TCCTCCTCCC
TTTGTGTTT TTTGTAATCT CTTTTGCTG TTGTTTTGG TTAAGAAAC CATGTTTTTT TCGTCTGTG AGTGGCTCCT
GTTCAGAAIT TTACTGATTT CATCTGCTGG TATCATTTAG CATGTGCTC TGTCGCCCGT AGTACTTTAA ACTAGACGTT
AGATCTAGAG ATGTGATCTA CTTGGGTAGG ACTTTGTCAA GAATACTTGT AAGTAGGTAT TTAGGTACCA GGGGNCACAT

SEQ ID NO:493: (Length of Sequence = 339 Nucleotides)

TGCCAAGTTT GCTGGACAT TATCAGATGG CTAGGGGAG ACGATGGACA ATCGGCATCA GTCAGAGCGG GAGTACATCA
GGTACCATGC AGCCACAAGT GGTGAACACC TTGTAGCCGG CATCCATGGC CTGGCTCATG GTATCAITGG TGGACTGACC
AGTGTATAAA CTTGACAGT GGAAGGTGTG AAAACAGAAG GGGGTGTGAG CGGTTTCATA TCTGGCCTTG GAAAGGGCT
TGTGGCACT GTAACCAAGC CANTGGCAGG CGCCCTGGAT TTTGCATCAG AAACAGNCCA GCGGTGAGA GACACAGNCA
CACTTCAGCG GCCCCAGG

SEQ ID NO:494: (Length of Sequence = 366 Nucleotides)

GTAGGCCTTT GGAAAGTAAT TAGGATTAGA TAAATCATC AGGGTGGGGC CACCATAATG GGGCTGGTGG CTTTATAAGA
GGAAGAGAGA CTTGAGCTGA CACGCATGTA CTTCCTCTT TGTATGTGG TGCCCTCAGC CATGTTAGGG CACAGCAAGA
AGGCCCTCAC CAGATATGG GGTGGTCTIN GACCTCCAC CCTCCAGAAC TGTAGAAAT AGATTTTTTT ATATATTACC
CAGTCTATGA TATTCIGTTA CGGNAACAGN AAACAGACTA AGACAAGCTT CTTAAACAAA TTGANAATAG AGTTTAAAGA
TNCAGACTTT CATGCGCTTT AACAGGGGCC AAGAATATCT ATTCA

SEQ ID NO:495: (Length of Sequence = 384 Nucleotides)

CGAGGAAGGC AAGAAGCGCA GGGGGTGGCC CGCTGGCGT CGGTGGCCTC CGCTCCTGCT CGCAGCCCTT GGTGTCAGAG
CTGGATACAA GATTCAAGAC CCTTCINTG CTGTINACCC GCTCCAGTT GGAGCCACAG ACACCCACCG CCACCCCGGC
TGGGTCTGCA TCCTTTCTG TGCTTTTCCC TCCAGATGC GGCCTCAGAC CTAGAAGCTC AACCCCTTA TGAGGGCCAC
GTCTGGGGT AGCTCCTGAC CINCAGCTT ATGTCCAAAT TTCACACCA TGGTTTTTCA TTGACCCCG CCGCTTCTCG
CTCATAATGA CAACNAGCTT CCTTTGAGAG GGATCAGAGN CCAATTGCAC AAGGAGGAGC CGCT

SEQ ID NO:496: (Length of Sequence = 342 Nucleotides)

TACCTTAGTA AATGCAATTT TGAACAGGC CCCATCTTC AACTGGTATA GCATCTTCCA CACCTGTAG CCTTCAACA
TCACCTGTTA AAATACTGCC CATTCCATGT CATGTATATC TGCCCATTTA TGGGAGCAGT GAGTGAACC CTGACAGTGA
CGGACTTTAA GCTGTACTTC AAAAATGTG AGAGGGACCC GCATTTTATC CTTGATGTTT CCTTGGAGT GATCAGCAGA
GTGAGAAGA TTGTGNCAC AGAGCCATGG AGACAATTCC TGTGGTATAG AGATAGTGTG CAAGGATATG AGGAAGTTGC
GGCTTGCTTA TAAACAGGA AG

SEQ ID NO:497: (Length of Sequence = 273 Nucleotides)

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SEQ ID NO:485: (Length of Sequence = 376 Nucleotides)

GGTCCGACGC TGTGTCAAGC TCTGCACCGG CCATGAGTAT GCAGCCAAGA TCATCAACAC CAAGAAGCTG TCAGCCAGAG
 ATCACCAGAA GCTGGAGAGA GAGGCTCGGN TCTGCCGCCT TCTGAAGCAT TCCAACATCG TCGGTCTCCA CGACAGCATC
 TCCGAGGAGG GCTTCCACTA CCTGGTCTTC GATCTGGTCA CTGGTGGGGA GCTCTTTGAA GACATTGTGG CGAGAGAGTA
 CTACAGCGAG GCTGATGCCA GTCACGTAT CCAGCAGATC CTGGGAGGCC GTTCTOCATT GTAACCAAAT GGGGGTCGTC
 CACAGAGACC TCAAGCCGGA GAACCTGCTT CTNGCCAGCA AAGTNCAAAG GGGCTT

SEQ ID NO:486: (Length of Sequence = 396 Nucleotides)

TTGATATTTG TGTCTAATTC CAGCTACTTT GAAAGCTAAG GCAAGGGGAT TACTGTATTA ATAAATTCTC ATGCTGTAA
 TAAAGACATA ACCAAGACTG GATAATTCAT AATGAAAAG GTTAATGGCC TCACAGTTTC ACATGGCTGG GGAGGTCTCA
 CAATTATTGG AGCAAACAAG AGACTTTGTT CAGGGGAATC TCCACTTATA AAACCATCAG ATCAAGTGAG ACTTTTTTGC
 TATCATGAGA ACAGCATGGG AAAATCCAC CCCCATGATT CAATTACCTC CCACAGGGTC CCTCCCAGGG ACATGTGGAG
 ATTATTACAA TTCAAGATGA GATTTGGTTG GGGACAGAGA GGCCAAACCA TATCAATTAC TTAAGGCTAG GGGTTT

SEQ ID NO:487: (Length of Sequence = 375 Nucleotides)

TGATTAAAT AATAGAGTTT AGTAATATGG ATGAATATAA GATAAATATT TAAAAAGCAG TGTATTTTT ATAGCCCAGC
 AAGATAAAGT TCAATATGT ATTTTTTATA AAGATGGATT TACAATAACA TCAAAATTA AAATGCACCT TGAATAATA
 AAGACATGTA AACCTTTT TAANGACAGA TTTTTTAANG CATTTTTAAA AATNCTTTT CATTGACAAA TAATTATCCN
 TATTINTGGG GTACACAGTA ATGTTTCAAT ACATATAATA AATAGTGATC AGATCAGAAT AATCAGCTTA TCCATCATTT
 CAAACACTTA TCATTTCTNT GTGTTAGGGG CCATTCAACA TCTGCTTCT GGCTA

SEQ ID NO:488: (Length of Sequence = 323 Nucleotides)

CACTGCATTA ATGATTGGNT TAACAGTATA TAAACAAGGG CCATGGTTTT TTTTACTAAA GTAGGTCTGA AAGATCAATA
 TAAATACTAA TGGGGGCAGG GAGGAGTGTT TTATACCCCA AACTCCAATA TTCCAGCTCT GTGTCCTGTC CTATTATTAT
 AATTTGTAAA AATCTTAACG ACGCAGTGAT TCGAGTTTTG GTAACCTCAA TGATGTGTTA GAGGACAATG CATCTTGGTT
 TGAAGAATTT GCTGTATCCG AAGGCCGGAA AAGTACTCGA CCACGATGAT TAAATACATA AAAGGATGGG TGATTCCTTA
 CCG

SEQ ID NO:489: (Length of Sequence = 326 Nucleotides)

TTACCTTTTA CTCTGATCAT AATCTCCAC CTGTCTAAGA GGTTATTTAT TCCTTATTTA GAGGGCCTCT ATTGCCATGT
 GCCTGGAATT ATTATATGCT CATCACTTA TGAAGAATAA AATTGTCTT TCCTGCTTAA AAGTTACATT CGTCTTCCG
 CTCAAATCCT GATCTGGTCC ATTAAAGAGT GTTCGCAGAC AAAGTTTCG AAAGATTAGA GAAGAATCCC CCCAAGATT
 GCCCCAACAC TGAACACAG ACAAACACTA TTTTATTTAA ATAAGGNGAC AGCTTTCTAA AAGTATACAT TCCTCTAATA
 AAAATA

SEQ ID NO:490: (Length of Sequence = 186 Nucleotides)

CTCAGATCCA TCAAGATGTG AAACGCGAA GTTGGTGCA GAGAAGGTAC ATGGGTTTCC TTCTTTTCTC ATCTGTATTC
 CCTTTTCTGC AATTATTTTC TTGCCACAT ACTAGCCAGC AAACCAGGCA CCTTTGCCAG AGCCATTAAAG CTACAAAAAT
 ACTTAATATT TTAATTTGAA CTCTGC

SEQ ID NO:491: (Length of Sequence = 347 Nucleotides)

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GCAGACCACC CTACATNCTC CTGIGTGTGG GGACACTGTC AGGNTGTCCT CCTGCAITTA GNCTCTGCTG AGTTTCCTAC
CATGTGNCOA GGATGNGTIC CATAGTOGGG GCATNAAGGA CTTAGGATGG GCCCAGTC

SEQ ID NO:479: (Length of Sequence = 360 Nucleotides)

GCATCGTATC TNCITTAAGA AAAACACITC TTCAAAATCC TACACTATGA AAAACTGTCT TCAGGAATTG TTTATTGGT
CCGTGATCT AGTGGAGCTG AGTCTTAA TCTTTCACCC CCAAGTTAAA AATTGGAGCA ACAAAACAAA ACTCCAGCAA
GGCATAAATA AGATATTAAA GTGCATATAT ACAATACCAG AAAAGTTTAG ATTGGGAACA GCAAAAATTT CTAGTGCAAA
AACTGCTTTT GCCAGCAAAG CTCCCTCTCT GGAATCAAAG GGCTACAGTA AAAGTTAAAA TTGGAACAGG NTTAAGCAAT
GTCTGTCTTT AGTCACAAGT NAATATATGT GCATGCAACC

SEQ ID NO:480: (Length of Sequence = 322 Nucleotides)

GAAATTAAGT CTAAGCAAAA AGAAAAATAA AATGACGAGT TACTGGGTGC AGCACACCAA CATGGCACAT GTATACATAT
GTAACAAACC TGCCCATCAT GCACATGTAC CCTAAAACIT AAAGTATAAT AAAAAAAAAA AAANTGAAAA GCTTCAGCCA
GAGGTACAA TGCTCACAAC TCATTGACCA AAACATCTCT ATACCCGINT TAGAGCANGG NGCAGGAAAG CAAAACCAT
CTTCTTACTG TTCCTGGNA TACAAGTTCC ATGAGGGGAT GCAATTININ TCTTGNCAC TCCTGTGTCC TCAGGGTATA
GG

SEQ ID NO:481: (Length of Sequence = 369 Nucleotides)

CCTGGGCAAA GCATTGATCT GGTAGCCTTG CTCCAGAAGC CTGTCTCTCA CAGTCAAGCC TCAGAAGCCA ACTCCTTTGA
AACTTCCCAA CAGCAGGGCT TTGGCCAAGC CCTTGINTTC ACAAAATCGC AACACAACAA TCAGATGGCA CCAGGGACTG
GCAGCTCCAC TGCCGTCAAC TCTGTCTCTC CTCAGAGCCT GTCATCGTC CTGGGCTCAG GATTTGGAGA GCTTCACCA
CCAAAATGG CAACATCAC CAGCTCCAG ATTTTGGACC AGTTGAAAGC TCCGAGTTTG GENCAGTTT ANCAACANOC
CAAGTACACA GCAGAATAGG TACAAGTCAA CCTTCAACT ACTACTTCT

SEQ ID NO:482: (Length of Sequence = 255 Nucleotides)

GAGAGAATCT CGCTCTGTG CCCAGGCTGG AGTGCACTGG CGCAATCCCG GCTCACTGCA ACCTCCGCCT CCGGGTTCA
AGTGATTCIN CTGCTCGGC CTCCOCAGTA GTTGGGATTA CGGGTGACCA CCACCGCACC CGGCTGATTT TTTGTATTTT
TGGTAGAGAT GGAGTTTCAC CATGCTGGG CTGGTCTGA ACTCTGATC TCAGGTGATC TGCCCGCCTC AGGCTACCAG
AGTNCCTGGG TTACA

SEQ ID NO:483: (Length of Sequence = 353 Nucleotides)

CTGGATAATC AGGGCCATGT GCTTTAACAG GATGTAAAGG GGAAGCTCAT GATTAAACAT GGGAAATATG CAGCAAATTG
CAAGACCTGA GCTTAACCGC ATAAITAGAA CATAATTTIN CACTTCTTCC AGAGCATCAG CCAAGCAAAG GACTGAGAAA
TCTGCAACCC AATGTCTTA AAAAGAACT TAGGCTTCAC ATTTGTGACA TAATTTCTTT TAAATGAAT ATAAATTTT
ATTTTINATA TTTGTAGAGC ATAGGATGAT TGAAATCCAG TGTGTGTTT ATCTGACCTC CATATCTAAT ATGGCTAGTG
CCGTTACTAC TCTACAGAAC GCGCAATAAG TCA

SEQ ID NO:484: (Length of Sequence = 371 Nucleotides)

GACCCAGAAA ATGGAGCTAG CTACATTTCT CACACTTACT GTCATAATTA CATGTTTATA TTCTATTAGT TGTAATTATT
TTTACCTAT CCTCTCATTA GAATGTTATA CCTATAGAGC AGATACCATT CCAGTTTAA TTTTGTGCC GACTCCTAG
TAAGTACGTG ACCTATTACA GGGAACTTAA AACAAACAAA AAGTCTGCTG AGTCTGGGAT GTTTTAAGGA TCGAAGGAAC
ATGTTGGTCC AATTTGCCTT CACAGAGGT TACCTCTGCT TTTCTACGA ATGTGGAATT GCTCCCATGT GGATTTTNA
GGAATTCAG TCTACCTCA GGGGAAGGNC CACATGTAAT GCCAGAGGTC T

SEQ ID NO:473: (Length of Sequence = 345 Nucleotides)

TTTATTGTAG TTCAAATACA TAAACTGAAC ATTCAAACAT CTTAAAATTA AACTTTAGCA ACAAAGTTTA ACATTCAAAC
AGGAGTATAG TTTACAAGAA ACACCCAGAA AGGTAAATTTG TTGTCTAATC CAGAATATTG ATAAAGATCA CTTAATGGTG
AATAAAATAT GTTTAACCAG TGGTTCATT CTGGCCAACA TGTTAGTTAT GACCGTGGTT CCATACCTGA GAAGAAATTA
CTACATAAAT CTCTCTTAG GCTAAACAAC ANGACTCGGT CTATAATTCA GAGGGENTIA TCAAAGCACG TAAGGGTACC
AAAATAAAAC TAATCTGATC TTTAG

SEQ ID NO:474: (Length of Sequence = 433 Nucleotides)

CAGAATTAGA GCTGTACCCC AAGGGGGAAT TCTGTCCCTAG GAGACAGTGA GTNCTAAGTA CACTCTGGAC AAGCACCAGA
CACAGAAGCT GCCTCAGTTT GTGCTCCCC TGCAAAGCAG AGCCTGAGAC AAGGATTGGG GTACAAGGAG TTTCACTCAA
TATTATATTT CCAAGATGCA CCCATGCTTT ATATGGCTAT AGTGCAATCA TTTTACTGCT TTATACTTTC CATTAGGTGA
CTATATTAGT ATATATTTAT AATTCCTAGG TCTTTTGTG CTCTTATTTG TTAATAATTA TAAACTCCAA GCCCATTTGTG
GTAGATTGCT ATTTCTCAGA GATATTTTCT GCTCCTTCTT GGGGGACAAT AATACTNITC TCCCATCAAT GGCAGATGTN
GGGCTTGINA CATTTTCTGG TCAATGGAAT GAG

SEQ ID NO:475: (Length of Sequence = 427 Nucleotides)

GATATGGTTT GTGTGCCCAC CCAAATCTCA TCTAGAACTG TAGTTTCCAT AATCCCCACG TCGTGGANGG GACCTGGTGG
GAGGTAATCG AACCATGGGG GTGGTTACCT CCATGCTGTC CTTATGATGG TGAGTTCTCA TGAGATCTGA TGGTTTTATA
AGGGACTTTT CCCCCCTTGG CTCGCACTT TTCCATGCTG CCACCACGTC AAGAAGGATG TGTITGCTTC TCCTTCCACC
ATGATTTAAG TTTTCTNAGG CCTCTCCAGC CATGCTGAAC TGTGAGTCAA TTAAACCTCT TTCTTTTAAA AATTACCCAG
TCCCAGGNAT GTCTTCATTA GCAACCTCAG AGCAGATTAG NCACAATTCC ACAACTTGGA GAATNGGTGT TCAAGTTTCA
CTCTGGCCTT NAACAACCCA AAATTTA

SEQ ID NO:476: (Length of Sequence = 351 Nucleotides)

CGCCGCTAGG GCGGCGGGG GTCCGGACGC CGGGCTAGGG GCGCGTCATG TGGCCGCTCA CGGTCCCGCC GNCGCTGCTG
CTGCTGCTGT GCTCAGGCCCT GGCCGGACAG ACTCTCTTCC AGAACCCAGA AGAGGGCTGG CAGCTGTACA CCTCAGCCCA
GGCCCTNAC GGGAAATGCA TCTNCACGGC CGTNATCCCA GCGCAGAGTA CCTGCTCTCG AGATGGCAGG AGTCGGGAGC
TGCGGCAACT NATGGAGAAG GTNCAGAACG TCTCCAGTC CATGGAGGTC CTTNAGTINC GGACGTATCG CGACCTCCAG
TATGTACGCG GCATGGAGAC CCTCATTCGG A

SEQ ID NO:477: (Length of Sequence = 333 Nucleotides)

GGTCTCACTC CGTCATCCAA GCTGGAGTGC AGTGGTGCAA TCCTCAATC ACTGCAACCT CCGTCCCGG TTTGAGTGAT
TCTCATGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGCA TGAGCCACTG TGCCCGCTG GGATATAGAA TCTAAGAGTT
GATTGTGGAA AACACGTGAA TCTATTGCGC GCATTTNTCA TTTAGCAAGA TGGCAGCAGT CCAGCTGTTC TTTGAGCTG
GAGATGAAT TTTAAAAATC CCCTTCACAC TTAATGTACT GACCGAGACA GAAGTACCTG AAAACAGCT NTGCATGGCA
GGCCCGGCAA TAG

SEQ ID NO:478: (Length of Sequence = 458 Nucleotides)

ACATGTTAAA ATAAGGTAAT ATGAAATAAT CTAACAAAAA AAAAAGTGCA GAACCAAGAC CTCTGTGATA ATCCTATTTA
AAAAAATAGC TACAATTTTA GTTAGAATGT TTCCCTTATG AGAAAGCATT TTCTGCATAA CTTTTAATGT ACTGACCTTT
TCCAAGCTTG CTGAGCTGGC CTTTGTCTCA ACTCACTTGG GACACCCTTC CCTGTGCTTC ACCAGSGCCC ACCCCAAGTC
CCAGTTTCTC TAGGGGGTCT CTCGGGACCC CTTGAATCCC TTINCTGATT TGTGCTGCCT TTAGCAGNCG GAATGGGCTG

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GACGACATTT ATTCTTTTC CAAATGTTAC AGTAAAACCA GGTGGAAGAG AATGGTTTTA GCAGTTAGAA AAAAAAAAAA
 AGTACAAATC TGGGGTTTGG CCATTAAAAG TTATTTACAA CAGTGGGAGA AAAAAAGNCA AGAAGTTGTT TCACATTACA
 GACCTCCCCC CACCCCAAAG CCTAATACTT GCTTACCAAG TCAAAAAGA GACACAGTTG ATTCACAGGC TGGAGGTTTG
 AACTTGAGTA AGACATTTAT AAAAACCTAG ACGGGGCAGT GTCTTNCCTA GCCCAGGTGC CACTTAGGCC AGCACAAGGG

SEQ ID NO:466: (Length of Sequence = 352 Nucleotides)

CATTGTATTT CCTTCTTCA AATTAATTAC CTACCAAAAA ATGGAAGAAG ATTTTACATG CACTTTAAAA TAGTAAAATG
 GAAAGTGAAT TTTTAAATA TATGCATTAA AAGTTTACTT TAATTTCCAG TGGGACTTCC TTTATGAAAT TTTCCATAAC
 CTCTTCTGG AGTATTACAA GATCTCCAAC ATCTCATAAA CTAAATGTGA TATTAGTGGG ACCATAAGCA AATGTATATT
 TTTAGTGGAA ATAGATTATG AATGAAAGCC AAGCACCTTA CTTTAAAGCC AAAATATGAG ATTTTCCATT AAAACCAATT
 GTTCCATAAT AGGGAGGGGG GTTTTTTAAT TT

SEQ ID NO:467: (Length of Sequence = 352 Nucleotides)

TGAAAGGCAA AAAATAAATA AATAAAATA AATACCATTT GCAGAGACAG AGAAACCATC AGAAGAAGAC AAGCAAGGTT
 GTTGAATTA CTACGCCTAG AATTTAGAAT AACTACTATG ATTAAAACGA AAAAGGCTTT AATGGATAAA ATAGATAGCT
 CCTAATAACA GATAGTAATA ACATATGGGT AATGTGAGCA GAGAGATGGA AATCTTAGAN CAACAACAGC AACACGNCA
 AAGCGTTAGG GATCAAAAAC ACTGTAAACA AAATTAAGAN TCCCTTTTAT GGGCTTNTTA ATAGNCTINGG ATACAGGTAA
 GTAAAGAATC CCTGTGCTTT AAGGAGCCAT CA

SEQ ID NO:468: (Length of Sequence = 336 Nucleotides)

TGACATCTGC ATCTTACATT ATTAAATGCA AAGGAATATC AAAGACTCCT CTGCTAGAAC CATTTTTATT CATAAAGTCA
 CATTATCATT GTAGAAGTCT TGTA AAAATG CTACCTGAAA TGAATTATGT CCGTCTCCC ATCTGGCTTA CAAAATCTTT
 GAGGAAGCAT CTGCCTGTA GCTCTTTATC TTTCTATTTT CTAATACAGG GACAATGTAT ATGGAAAGAT AAATGTGTGT
 AGGTGTATAA ATTCTCAATA AATATTGCT GAATTAGATT GTACAGTTGT TATCTTTTAA GNTAACTCA TCCTGAGGTA
 CATTTTATTA TTGGGC

SEQ ID NO:469: (Length of Sequence = 156 Nucleotides)

GACCGATGTA GAATCTGTC TGGAGACGTT CTCCCTTCA ATTCAATGGG AAGGNTCTTT TCTGGCATGA NCTCTCGAT
 GTCTAATGAG CTCTGAGCAC CATCCATAAG CTTTNNACA TTCTTTANAT ATAAAAGGTT TCTCTCCACT GTGAAT

SEQ ID NO:470: (Length of Sequence = 350 Nucleotides)

TTCTCATGTC TGAATTTAC ACGCACAAGT CTGAAATGTG AAGGTTCTT AATGTTGGTT TTATGGTTTG TGTAAGATTT
 TTGGGAAATG AAGGGCTCTT CATTAGGATA AAATGGTCTT AACTTCCCAG AGAAGAATTT CCTGACAACG TGGCTGAAGT
 TAGATACAAA TGTTAATATA GAAGANTGCT TTTATTGAA TTTCTAGCAA ATGGTTTCA ACTACTTTAA ATATGACCNA
 CTTGAAAGTA TTATCCINT TTTAAACTA CTTTINATGT ATAGATCTAA GGTCTGCTTG AAGCTAGTAG GTTAAAGTGT
 TTGAGAAATA AAGGCAAGAT TTTTNCNTTA

SEQ ID NO:471: (Length of Sequence = 270 Nucleotides)

GGAGCAGGGC TGGGAGTCAG TGGGAGATTG GGAGTCCAAG TCTGGACATG TTACATATGC TATGTCTATT ACAGATCTGA
 GTATAAATGT GAAGTGGAGT TTTACCACGT GATTCTGAAG TTCAGAGAAG AGGTACAGGT TAGAGATAAA GATTINGGAG
 TCACAAATAT AAAGATGTAT GACTTINATGA GATTACCAAG GAAGTGGAGA TTAATAGCAA AAAGAAAAGT TTCAAGCTTC
 AAGCCCCGAA GCATTCTAAT GTTTACAGCT

SEQ ID NO:459: (Length of Sequence = 339 Nucleotides)

ATTTTCCTAG AACTGAAATC ATCTACGGTT CTCAGAGCTA AACTTCCAAA GCTACAGTCA GCAATTTTTTC ATCAGAGCCC
AAGGGAGAGG GGCCAGGGTA AAAGAGACGA GACTGTAGAG AGGCATAGAG AGACCAAGTAG GAAGAGGGTG GGAGAGGGCA
CTTATTTCTC TCTGTCTCTC CAGTGGGTTA CAAATCAGAT CTGGTGACAA CACTGAGGGG GCCAGGTCAG GGTATGTINGA
TGAGAAATGA CACTGGAAGG AACATCAAAG CCGCAGCTAC AAAAAGAAAG TCATCAAGCC CCAAATAGAA GGGGGAGCCT
CCCAGTGCAC CTCAGAAAT

SEQ ID NO:460: (Length of Sequence = 380 Nucleotides)

GAGCTTTTGC ACTGCAAAAG GAACAGTCAG CAGAATAAAC AGACAGTTAG AAGTACTTCC CTATGTAGAG ACACACTCAA
GTGAAAGGGA ACCAGGCTCT ACCACTTGAA ATAAGGAGTA TCAAGGAACT TGTGGACAGC TTTTAAAACT ACCACTGGCA
ACTAGGTCTT GAGGTGGATA AATGAAGAAA TTTGGGGAAT CTCACACTGG AGATGTTTGA TGTAGGTAAA TGANCTGAGA
TTCATTAGGT GTGAAATAAT GAAGTGTATA TATAGTTCTG CATATACATG CCTGGGGAAG GTATAATATT CAGAGGCATA
CTATCACTCA ATTGTATCT GCTGTGGGCC TCAGACAGTA CAGGGGCAGT GTTTCATTG

SEQ ID NO:461: (Length of Sequence = 317 Nucleotides)

GTCAATTAAGA AGCCTTTATT GGGTTATATT CAATTTGACC TCCCACCAAA TTAAGCGGGA AAAAACAAAA AAATAAGAAA
TCCAGTAAG AGAGCCCCCTC AAGATTTCAT AAACACAAA CTAAAGCTGC TAGTTAATAA GGAAATGGCA GAATTTTCAG
AGCTGTATAA TACAAAAATT CCGTAATTT AAGCAGATGT TTTCTCACT GATGACAAAT CTCCAACAC AATGTGAAGT
TATGCTACTT GGGATATTTG TAGGCAAAAC CATTTTTTTT TTGTACAAAA ACAAAAGCAA GGGACCNTGG AAAAAAA

SEQ ID NO:462: (Length of Sequence = 261 Nucleotides)

AAAAAGGCCA TAAATCCTTN CCGTGTGGA GCTTACCTTC TAATAAGGAG AGACAGAGGG TNAGAAACAA ACAAAACAAA
ATATGTNAGT TAACACAGAG TGTGGAGGG GTTCAGGTGC TATGGGAGAA ACGTGGAGCA TGTCAAGGNG AGAGCAGGCA
AGAGGGCATT CTGGAAAGGC CTAGGANGAT GGTGACATTT TACCTTCATA TCCACCAACC CCCAGCACAA AGCATTTTCC
AGAGGAGGNC AGAGGAGGGC A

SEQ ID NO:463: (Length of Sequence = 387 Nucleotides)

ATACAAGTAC ATCCAGGAGC TATGGAGAAA GAAGCAGTCT GATGTATGTC GCTTCTTCT GAGGGTCCGC TGCTGGCAGT
ACCGCCAGCT CTCTGCTCTC CACAGGGCTC CCGCCCCAC CCGGCTGAT AAAGCGCGCC GACTGGGCTA CAAGGCCAAG
CAAGGTACG TTATATATAG GATTGCTGTT CGCGTGGTG GCGAAAAAG CCCAGTTCCT AAGGGTGCAA CTTACGGCAA
GCCGTCCAT CATGGTGTTA ACCAGCTAAA GTTGTCTCGA AGCCTTCAGT CCGTTGCAGA GGAGCGAGCT GGACGCACT
GTGGGGCTCT TGAGAGTCCT GAATCTTAC TNGGGTTTGG TGAAGATTTC ACATACAAAT TTTTGA

SEQ ID NO:464: (Length of Sequence = 397 Nucleotides)

GTTAGCGTG GGCTGTGGC GTCGCTGAA GTACACAGT ATTGTGGCTC CATTGGCTGA GGATGCTTCT CCAGCGAAGG
AGGCAGGGAG CCGGGGAAGT GGGGTGGGT CGCGACACCG ACAGCAGCTG CCAGACCAGC CATGCTGCGC TCAGTCCCT
CAGGCTGTCA CTCTTAATCA TCATGTCAT ATCTCTGGGG CGTGTGAGT ACCATCAACG ACGTGTCCCC CAAGCTGCAG
AGGACGCAAA TCCAGCTCTC CAAGAGGCTC TGTGGCCCT CTCCACATGG GCTTINAGGT CAAGGGTTGG GGGCACGTTC
GGACGNCCT TCCTGNCCT TTINGAAGAAG ATCCTCCAN GTNCCGGCT TCAGCTTCT CCGGGCTCT TTTGGCA

SEQ ID NO:465: (Length of Sequence = 320 Nucleotides)

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SEQ ID NO:453: (Length of Sequence = 382 Nucleotides)

ATGAGGGAAA AGATGGTGCC ATGAAGATA TTATCACAGT GCTGAAGACT GINCCCTTTA CTGCTCGCAC CGCCAAGCGT
 GGCTCTGGGT TTINCTGOGA ACCTGTTCTC ACTGAGGAAT ACCATTACTA AACTATTACT CTTTCTCACC TGATGCTCTT
 AAAAGATCTT AGAAACCAAC CATAAGAGCG AGCOGATGCG GTGAGGAGAA GCGTCAGGCG GCGCTTTGAT GATCAGAACT
 TGGTTCCTGT TAATGGTGCC GAAATAACAA TGTGAACCTG AGACTGGCCT GCAATGAATA CAGGGGTGTG CGTGTTCAGG
 AGGTTTTCTG TTGCGGTCAC CCATGATGGC GGGCCTNCCC ATTTGGGCCA ACTTTTCCTG GG

SEQ ID NO:454: (Length of Sequence = 391 Nucleotides)

CGTCGCCTG GTGIGACTGG CTGGAGAAAT AAGTTAGGGA GAATCTAGAT ATGGTTGAAT TGTCATTGCT GCTCAAAATT
 TGTTTCTTTG TGACAACAAC AACACAACA ACAACAACA CAACAACAAC AACAGGTGAA ATTATCTTGA AATACAAAAG
 AACGTCCTGT GGTCTGAGA GTGAAAAAG GAATCCTTAA CAGCTTCAGC TTGCACCAAG AGGATTTTTT TTTATCAGCT
 TCCCTTCATA AGAGAGGATG GAGGATTTTG GAAGAGACAG AACCTGGGAG AAATTTTCAGT GAGCTGCCAC TTAAGTGGTT
 AACCTACTTC CACAGAAGGA ACCTATTATT GTTNTATTG GGAATTCAGT AAATGTGGGC CATGTAAAGG G

SEQ ID NO:455: (Length of Sequence = 282 Nucleotides)

TTGAGTACTC ATTGAGGAC TGCAATCATA GATTTAAAGT GTAATCAGTC AACTCAGTGG AATTACTTTC TCATTTAATC
 TTAAATTGCT TCAGGACTGT TTCAGCCTAA GCCAGTAGCT GGGTTTAAAC AAATTGGAAG ATTTTINCTAG GAGAGTTTGG
 CACGAGGAGA GAGGGGCAAA GCGGTGTAAG GCAGTGTTTA TAACAGTGGC CCATGGAATT GATCATGGGT AAAGAGAAAA
 CAAGGACATG CGAGGAGGTG ATAAATAGAN CAAAACAAAG CA

SEQ ID NO:456: (Length of Sequence = 340 Nucleotides)

CTAATTATG TTGAGATCT TCAATGAAAT TAGTTACTAA TATTINGCTT TATTCTTCTC AAAAGATTTA ACATGATAAT
 TCTGACCTAA TCAAAAAA AAAAATTCAT GGGCCACTGT TTTGCATGTA ATATGTAAAG NCTCACCTTG ATGTTAAACT
 CCAACCTTG GCTGAAACAG GTTAATGATC ATTTGTINGT ATTTATTCT ATAAATAGTT TGAAGTTGGC CAGGCCTGGT
 GCGTCTCGC TGTGTCTCC AGGGTTGGAG TTCGGTGGCG CAAATCTGG CTTCACTGCA AGCTTCGCC TCCCGGGGT
 TCACACCATT CTCCCTGCCT

SEQ ID NO:457: (Length of Sequence = 338 Nucleotides)

ATGAAAAAGT CTCAGAGAT TATCAGTGGG CGATGACAT TTGCCCTCTG TTGCTATTCT TTGACATTCA TGAGATTTCG
 CTACAAGGTA CAGCCTCGGA ACTGGCTTCT GTTTCATGC CACGCAACAA ATGAAGTAGC CCAGCTCATC CAGGGAGGGC
 GGCTTATCAA ACACGAGATG ACTAAAACGG CATCTGCATA ACAATGGAAA AGGAAGAACA AGGTCTTGAA GGGACAGCAT
 TGCCAGCTGC TGCTGAGTCA CAGATTTCAT TATAAATAGC CTCCTAAGG AAAATACACT GAATGCTATT TTTTACTNAA
 CCAATCTATT TTTATAGG

SEQ ID NO:458: (Length of Sequence = 370 Nucleotides)

GTTCCTTTTC GGAGCTGAAC CAAAGAATGT GCACCTCTT TCTCTAGTGC TTGGTGCTT GCTTATTTTT GTATTGTGC
 TTTCCATCCA TCTTCTGTGA TCACAAGGCA TTCTTAAGGT TTCTAGCAC GACTTGCGGA CATCCAGACT CGTGGGGGGC
 CCACCCATGG CTCGGTAAGC CAGCAGCCCA GGGCACTGGC ACTACCATGA GGCATGCTAT TAATTGCTGC ATACAGCTGT
 TACCCGACGG CGCACACAAG CAGCAGGTCA ACTGCCAAGG GGGCCCCCAT CACGGTCACC AGGCGTGCCC CACGTTGCAA
 AGGAGGAAAA ACAAAATTCC TGGTTCCGT GTGGGACAGT AAAGCAGATG

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TTACTTCAGT AAAACAAGCC ACAGCAACAT TATGCTCTGC AGAGTCTTCT GTTCACCTTT GGGATGGAAA AGAGCTGCTT
CTCCTAGGNN GGCAACTAAG GCCCAGGACC AAAACTCCCA TCTCCTA

SEQ ID NO:447: (Length of Sequence = 295 Nucleotides)

CTGCAAAACC TTCAGCATTT AGCTAAAGTT ATTTACAAT TCAATGCTTG TCTTGCACTG TCCTGGTCAT TTAAAACTG
GTATCTCTTC AATAGCAAAT AGTATCATA CAGACCACTA AATTTGGAGG GAAAGTGGTT TCTATTGCAG ATGGATGTAA
TTAAAAITGG TGTAAATCAC AGGGTACAGA ATTCTTATCT GGTAGAATT CTGACTTTTT TTTTAAAGAA GAAAAATAT
ATCCAGATCT GTATCCACAT GCTATTTAAA TGCTCAGGNC AAAAAGAAGC CACTA

SEQ ID NO:448: (Length of Sequence = 233 Nucleotides)

CAGAATCAGC CCAAATGCC ATCAATCAAC TGTGCATAAA GAAACTGTGA TATATATATA TCATAGAAGT TCAAACAGAA
AAAATACAAA AAACCTAGCA GAGGATGTGA TCCTTTGCCG TTATTTTGA TGACCATGCC ATCTTCTAAT CCCCAGAAAA
AAACTGGAAA ACAGAATAAA TATAATTINC TGATTAINCT TATGTAAACAT AAATGGAATA TATATATATA TAT

SEQ ID NO:449: (Length of Sequence = 341 Nucleotides)

ACITCCTTCC TCAGGCTCCT GTACCAATCT TCAATTCCT TGGGATGTCC TAGTCTAAAA CATTTATTTC ATTGAAAGG
AAAAATATCA ATTTCTATCT AAATTGGAGT AAGATTCAAT TCAGATGTGT TTATTTACAA AACATAAGTT TGTATTTAT
CTGTGTTTAA TTGATCCNG GAACATTACA TGTAAGAAC ATTCCATGTA AAGAACCAGG CAACTTGGCC AGGCATGGTG
GCTCACACCT GNTAACCCCA GCACTTTTGG GAGGGCCAAG GCAGGTGAAT TGGTTGAGAC CAGGNGGTTT AAGACCCAGC
CTGGGGCAAA TATTGGCGAA A

SEQ ID NO:450: (Length of Sequence = 313 Nucleotides)

TTTTTTTTT GACACAGTIT CCAGTCCITG AAACCTTAG CTAATCTTGA GCATTCCTTC AATGGTGGGA ATGGCAACA
GATCACCATA GTATTAAATC TCTGTGTAAT TTATCACTA GAATGGTTAA TTCCATATC ATAGTAGAGC TGTGTCAGAT
ATTTTGAAAT CCCATTATAC TCACTGCCAC TTCAAGATTA CTGTAGTTGT TAGAACAGCT GCTAGATCTT ATTACTTAAT
AAATTAATAA AGTGTGAATA TAACTATATA ACCATTTTNA AAATGTTTTT TGGATAACTT TCAATATAAT TGG

SEQ ID NO:451: (Length of Sequence = 351 Nucleotides)

GGGCGGCTC CTGGGCAACC ACCCAGCTCA TTGCGGAGC GGCTCCCTC CTGGGGTGA GTGTCTGGG CCTGAGTCTG
CAGCCTCAGC CATCTGTCC CCAACTGAT CTCCACTGC TAGTTACAAA CAAATCGCCC GGCCTGTGCA AACCCTCTG
GCTCAGTCCC CAGTCCCGG GGGCATCATT TCATTCTTTC CTAGCCGTGA AGGTTTCTCC TGAAAAATCT ATTGTTAGTC
TAATATGAAT TTCTAATAT GTGACTTAAG GCTTTTCTCT TGCTGCTTT AAAATTCTCT CTTTGTCTT TGACTTTGAC
AATTTGGCTA TAATGTATGT TGGAGAGGAC C

SEQ ID NO:452: (Length of Sequence = 363 Nucleotides)

GACAAGGGAG AATTCCTGCT TTACCTATGG ACTGGCTTAA GCCGTGTGC ATCCGAGGAA TGTTCAAAT GTGTCTGTGT
TTCTCTTAC ATTCCTTAT GTACCTCATT GTCAATCA CTTTGTAAA TTCCACCTAA CATTTAATTA TTTTAAATTT
CTCCGTATG AAGTTATTTT AAGACACTGG AATAAGTGA GCTTGTGTTA TAACAGCATA GGATTATAAA CAACCTAAAG
AGTCAGCAGT GACATTGATG GCACATGCAT ACAATGGAAT ATCTGTAGC TGTTAAATA ATAANGAAGA TCCTGCTCTG
TGTATTTGAT ATGGGAAGGC CCCCAGGT CTACAGTTAA GGG

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CACCATGTTG CCCAGGCTGG TCTCAAAC TCGAACCTAG GTGATCTACC CGCCTTCCAA AGTACTGGGA TTACAGGCAT
GAGCCACCAT AATAA

SEQ ID NO:441: (Length of Sequence = 356 Nucleotides)

ACTAATTGIG TTCTGCTTC AACCTGCATT TCCAGAGGTG CCTGTGGTC TGTAAATGGT TCTGGCATGT TTATAGGTAT
TACAAAACCA AGTCTTATTT TGCATTTCAC AGGATTTAAG ATGAATAAAG TGATGTGGTT GTGCTAGGTT AGAGTTGTAC
AAATTATACT CCCATOGGG ATGGTGGCGT CCCAGGCC TAACCTGACC TCTGCCCTCA CGCCCATCGT CACGGCTCC
CGTGCTTCA ACGAGGAGCC CCTGACGCTG GCGGCTTTC AGCAGGNC OGGCCAACT CAGTGACGTG GTGCAGCTCA
TCTTCTGGG TGGGACTCC AATCCCTTT CCTTT

SEQ ID NO:442: (Length of Sequence = 371 Nucleotides)

GATGATTTTG TATCTTTTC TATTTATGA GATAATCAAA TGATTTTGT CCTCGTCT ATTGATGTA TGTATTGA
TCATGTTAT TGATTGCAT ATGGTGAGCC ATCCTGTAT TCTGGTATA AATGCCACT GATCATGGTA TATNATCTTT
TINATGTCT ATTGGATTG GTTGCCAGT ATTTGTGA GAATTTTTC ATCTGTCT ATTAOGGATA TTGGCTGTA
GTTTTTTTG CTGTTCTT CTGTGGTTT GATATCAGGA TAATGCTAGC TTGTAGAAT GAGTNAGGA GGAGTTATCT
ACTCTCAAT TTTGGGAAC AGTGCAGAA CTGTGTGTG TTTTGAACA G

SEQ ID NO:443: (Length of Sequence = 329 Nucleotides)

TGAATGCCT TTATTTTTN ATTTCCATC CAGAAACCC AGTGTGATG TGAAGCAGC ATGAAACAA CATCTCCCA
GGCCTCGCAG TAGAGGCGAA GGAACAGAG CTGCCATGT GCCTGTNTCT AAAGACGCA CCTCAGGTT GATGTCACCT
GTGGGAGACC GGTCCACT ACAGACACCA GTGATGGTC CACCAGGCC CAAGCTCCAG CCGCTGAGT CCCCAGACA
CAGGCTCATT AATAGCTTC GTACAAAAC CCAAGGGTGT CCTCCAGCT GGTAAAAAT TGGCAATTT CTACTTGGAG
GTCTGCTGT

SEQ ID NO:444: (Length of Sequence = 358 Nucleotides)

TTTTTTTTA AGTACATAGG TCTTATTTA AACACTGATT TTTTTTTAA ATATATACAC ACAAACCTA GTTCAGCAAG
GCTTCATGAT ATACACCAAT TCCAAAATA AACAAATCAA TGGTCCAGT GTAGAATGCC AGATTCTTT TATCATCTGC
GAGGAAAGA GAAGCAGGAT GAGGAAGAT GAGGGAAGC GGGGACAGC TCTGCCAGA NGAGCTGCC CTTCTGGCA
CAGCAAACGC TCCAGGCTG GGCCCTGTC ATATCTGGAG TCGGAGGAG ACTCCATCG GCGCTTTG GACTGAAAGG
CCAAGGCTG TCACCAGGTC CCGAAGAGA GGGAGGCA

SEQ ID NO:445: (Length of Sequence = 302 Nucleotides)

TCAGAACGT GAGAAATAA TTGCTGTTGT TTATAAGTA ACCTGTTAT GTTATTTTT TATAGAAGC TGATCAGAT
AAGACAATAT TGGATAGAAT ATTGAGGAT GTCTTGCTC CAATGTTGC CCCCCTGTAC TGAGCTCTAA TCTACACTCA
CCTAAAAAT TATAAATCA TAATAAAT GAAAAAGTCA AACTCTCAAT TGCAATCCAG CACAAATATC ACAGTGNIT
ATTAAAAA TTATGTCAAG GCCCTAAAA GCTAAATCC NCAGNTCTG TAATATTTCT CT

SEQ ID NO:446: (Length of Sequence = 367 Nucleotides)

ATATATATAT ATACACACAC ACACATACAT ACATACATAC ATATACATAA CCTGTTTGG GTAAGGCTA TTGACAGAAG
CCGATATCT GGGTGAAGT TAGAAGATG GCAAGGAAT CTTATCTCAG AGTTCAACA CTGCGACAAT GTGGAGAGAA
GTCTCTGGG AAAATGCAGA TGCCCAATA CTTCCAAAAG AATCAGGAA GTTGGAGTAT TTTTGAGATT TACAGTGTCT

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CTTTTTTINAC CINCACAACA AGGCACTCCT CTGCAACCCA GTCGGAATTT CAGTGCCTGT GGGTCAAAGT

SEQ ID NO:435: (Length of Sequence = 427 Nucleotides)

TCATAAACA GTAGATTTAT TTTATGTAGA TTGTTTTTC TATAAAAATA TATTTATGTG TTCACAGGAA AAAAGTTGAG
 TTGGTATGTG GGGGTGACTT TCAGATACAT AATTAGTTAA AGGTTTGCTT ATGAAGTTAG AAGGCATCTT AGCTTTTATC
 ATTTTCAAAT TTTTCTTCAT AAAAAAGAAC ACCCTGTGAC AAAGATAAGG TAACTGAGAT TATTATTAGC ACTTTAGAGT
 TGAGAGAGTT TGAAATAAAA AGGTTAAGCA ACCTGCCTAA TGTTTATGTA CAAAATCAGT GCTGGAGCCA GGAAGAGAAT
 TTGGATTTTC CCAACCTTGT GACAGTTCTC TAGGGACTCA TGCCCAACCA CCATTCTTGA GACTATATAC AATCAATTAC
 ATTAAATGA TATTGACAGT AGACTAG

SEQ ID NO:436: (Length of Sequence = 249 Nucleotides)

TCAAATAACC AGGAGGGGGA CAGAAGATGA TGGCAAGGCA GACTGGGCAG TGTTTTNTAG ACACAGAACA AAGAATCAGA
 ATTIGAAAAA AGANGAAAAA CAAATCTNCG CAGCTGCAAC TTTAAAGTAT CACCTTTATA GATGGCAGGG ATTTCCATT
 TGCAAATGGA ATCTAAGATT TCAATGTGNA ATCTTAGAAT GCAGTTTTAC CACTTGCAGT CINGTATTTG TGGTGGCCAT
 GTGGTGAGT

SEQ ID NO:437: (Length of Sequence = 404 Nucleotides)

GTCAATCACC CTAATCCCTC TTTCACCTTC ACAGAACCTT CACACTCCAA TGTACTTGCT GTTTGTAGAT GCTCCTATAA
 ACAGAAAGCT CTGGGAGACA GGTGTCTTGT TATTCTTGCT CTCTGTCATA TCTCTGGGCC TATCACAAGT ACTCAAAGCA
 TAGAAGTTCA ATAAATATGT GTTCAATGTA AGAAATGATC AGTGATTCTC AAGCTGCAGT GCGTTCAGGA TAACCTAGAC
 AGCCTGTTAG CACGCTTCAC TGNNNCCAC CCCACAGTT TCAGGCTGCG TCTGGGNTGG GCGCCAATAA TCTGTATTCC
 TAAAAGTCCC CAAGCAATGC TGGTGTCTGT CGTCCAGGGA CCATGCTTAA AGAACCACCC GGAATAGGAC TGGTGGACAA
 AAGG

SEQ ID NO:438: (Length of Sequence = 337 Nucleotides)

CTGCAACTTA TACCTTCCAT TTAATAAGT CCCAGTATGT GTCAAAGTAG TTTTCATTCC TCACAGCCAT GTTATGAGCT
 AAATATCACT AACTTTCCCT TTCAAAGGTG AAATAAAGTG AGACTCTCGA AGATTAACTT GCGCAAGTTC ACCTAGCTCG
 TTAGGAGGCA CAGGTGGGAC TTGAACCCAG TTCTTTCTGA ATTCAAACCC TCCAAAATGT CTGTACATC AAGCTGCTTC
 AATGAGATGC TAGAAAATCA GGACAGTGAG CAAGCTGGAG ATAANGGAAG ATATGGAGGA ACACGGGAAG TGTGATCCTC
 ACACACATAC CCTGCAG

SEQ ID NO:439: (Length of Sequence = 380 Nucleotides)

CATCGTGTAT GAAGGTAGCC ATTTTGTACA TGTACCTTG TTA AAAACAA AAGAGCAGCA ACATGTTTAG AGTGGTGTCT
 ATAGATAGAA CACTGCTGTT ATGTTTAAGG AAAATTGGGG CGGGGCGAGA AAAGATCAAT ATGACTAGTT AGAAGACTAT
 TAAGGAGAAC TTTGTACATG AATTATGGAT GTAAGAAITA GAAAAAATA GATGATCATG TTCAGAAATT TAGCTTTTTT
 ACAATTGTAG TGGAAAAGAA AACTCCTAGA GTAATGAATC AATGGTATCC TACAAAAGA GAGGTGCCAA AAATACCATG
 AAATATTATA TTA AAAAATT CACACGNATA GGTAGTTATA ATATGTAAAG GCCAGACTTC

SEQ ID NO:440: (Length of Sequence = 335 Nucleotides)

CCCTGAGCTT TTATTGACCA GTGGACTGTG ACTTTTGATG TAATTTTATT TTTGAGAGAG GGTCTTGCTC TGTCACCCAG
 GCTGGAGTGC AATGGGGTGA TCTTGGCTCA CTGCAACCTC CGCCTCACGG GCTCCAGTGA TTCTCCTGCC TCAGCCTCCC
 GAGTAGCTGG GACTACAGGT GCACACCACC TTGGCTGGCT AGTTTATGTA ATTTTGTGTA TGTCTGTGGA GACAGGGTTT

SEQ ID NO:429: (Length of Sequence = 422 Nucleotides)

GAGGGTTGGA GACAGGAGAC AGTGGGGTGG GAAATCCAAA TCTCAACTGC TTTTGTA CTG TCTCCTGCTC COGAGTGCCC
CANAGCCCAT GCAGACCCCTC TGCTGTCTAT GATATCCTGT TCAGCCCTCA ACTTCTCTA CCATCCCTGC AACTGGGGTT
CACTGTGAGC CAAACCAGTT TGCTTCTGT TTTCTAAAAG CAGGCAGCCC TTCAGGACTG TMTCAITCAA GGCATTTCCC
AOCCTINTTC TCCACTCATA TCCCTTCCCA AACTGCCTTT CCTCATTTCT COGTCTCCAG GGAGAGGGAC TNCAGGCTAC
CACAGNCAAA AATGGTGGTC TTCAGTCCTA CGTAAGNCAA NCTGTGTGAG TGTGTAAGGA CTNAGGGTTG CTCACAAGGG
GACACACAGA NGTGGATGCC AG

SEQ ID NO:430: (Length of Sequence = 332 Nucleotides)

CGCGATCAGC ACCCGGGACA GCGCCACCGC CCACTGTCAG GGGNTGGGGT COGGGCGGGG CTNGCGCTC GGGTCTCCC
GGNAGINTCC CGTCCAGCCG TOGAGCAGGG TGCTTGANTN TMTCTGAGA AAAGACTCTA GGACCCCGCC ACCATGTTCC
CGGAGCCCCC AACCCCGGGG CCTCCATCCG CGANACGCC TCCGACTCC AGTCGCATCA GCCACGGCCC AGTCCCCCCC
TGGGCCCTGG NCACCATCGT GCTGGTCTNA GGCTCCINA TCTTCAGCTG CTGTTCTGT CTCTACCGGA AGAGCTGTCC
GAGGCGGACA GG

SEQ ID NO:431: (Length of Sequence = 413 Nucleotides)

TGTCAATTAT TAAGATGGGG GACATCCAAG CACCTGGAAC AAAAAGGACA CTAAGAATGG GAGAAGAATA CACAAAGGGA
GGTAGTACAG GGCCAATAAC AGATTTTGG AATTTTCAA ATTTCTCTT GAAGTAATTT TACAGTCAGT AAATGGAAGT
GGAAAAGAGG AATAGAAGAG CATTTTCATG ATTTTCTTT TCTCTGTAC TTACACATCT CATGACCTCA TGTCCCGA
ACTTAACACT TAGTGGGGT CTAGTAGATA TTTGGGGT AAAAGATGTT TGTGTTTTG CATTTGTTC TGTGTTTTG
GCTAGCCTGT GAATCTAGCA TTGTACGTGA GAAAGTGCAT TTCAGATTGA AAGCAACTGG GTTTTGAAA TGAACCTCAA
TAACATATCC CAG

SEQ ID NO:432: (Length of Sequence = 292 Nucleotides)

TTACCGTGT TAGCCAGGAC GGTCTGATC TCTGACCTT GIGATCTGCC CACCTGGCC TCCAAAGTG CTGGTATTAC
AGGCGTGAGC ACOGCGCCG GCCACCATC ACTAATTTT AAGAAATG TGAGTGTCT ATATTNCTT CCACTCCAT
AGCTCCAACA TTGTGGCTA TTATGAATTT GGCTATTAG TGATGCCAAC AATATTAAAT GAAAAAAGA TATAGCAGTA
TAGTTGAAGG AGGAAGCTGA AAGAAAACGG TCCATCNGTG AGGAAAAGGC CC

SEQ ID NO:433: (Length of Sequence = 335 Nucleotides)

TTTTTTCTC AGCAGAGGAT TTTATGGTG GTCACCTGTG GCACAGGTA GAGGAGCCGA AGTGCTGINT TTGTGGTGGG
GGGGGACCA CAAACCCCGG CCTGCCCTC TTGCTTACAT AGGCTTCCCG CCTAGAAGCG CANCATGAAC ATGCCGCTAC
GGATCCGGTT GTAGTCTGGG AGCTGCTCAA TGGGGCCATA TCCAGCCACT GCTGGGGCAC TGGTCATAGA TGTACTINGA
GCAGATCTCA GTIACCACAC TGGCATCCAC CTCGCAAT COGGCTTCC CAITCAGCCA GGGGGGNATG CGGNGGGCC
ATAGGTCAGG AGGCT

SEQ ID NO:434: (Length of Sequence = 390 Nucleotides)

GTGCTGACT GCTGATTGGA GATGAOGTGT ACCCATCTC TAGACAGTCT GTGCTTTCC TGTCTTTGGA GCTTCCAGTT
CCACCCCAT CAGTTTTTT CTGACCACTC CATCTGCCT TATTTCTCTC TCTTCTTT TGACTGGAAG AGTACTCATC
TTTTCTAACA TCTTTTATA AACTGTTTTG ATTTCACTTA TATGATTTT NAACGTATAA TGTGCTGGTG TTCTATTTCC
TCAGTTAGAT CAGAAGGCC CTAAAGACAG GGCTCCATTG GTGTTAACT GCCATCTCA AGGTCTGGGA CTTGATTTCTN

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SEQ ID NO:423: (Length of Sequence = 391 Nucleotides)

CTGTCTCTTA TCTGGGCAAG CTTTAGACAT ACTAGCTTGG TTGGAACTG ATATTAAAG CCTAAAACAT GTAACTTTNC
 TTATCAGGTT ACTATCATGG GGAATAAAG ATTCTGGTT TTTTGTATGT NCCATAACTA TACTTTAGTA AGCCCTGATA
 TACGGTGTTA ATTTTCCINC AGTGAAGGAA ACATGAAGAT ATATTATGT GCACACATAC ATATATATGT ATATATAACG
 TATATTCAA CATGCACTCA GAGGAAGTTA GGGAGAGAAG TTTCTAGCTA AACATGATCT TGTGAAATC TTCCATATGT
 GGAAAAGTCG TCAGTTCATC TGACATAGAG CAATACCATA CATATATACA CACAGGGTGC TATGGTATAC A

SEQ ID NO:424: (Length of Sequence = 379 Nucleotides)

TGGGGAGCCT GAGGCATGAG AATCGCTGA GCCCTGNGG TGGAGGTGC AGTGAGCTGA GACCCCGTCA CTGAACTCCA
 GCCTGGGTGA CAGAGCAAGA CTCTGTATCA AAAAAACAA CAAACANACA AACAAAAAG CCTATTATAA AACAAATAGGA
 AATGCTGAAG TCTAGTGCAC CAAGACATAC TGAATTTCAA ACTAAATAA TTAATAATTAT CATGTACATT CCACTACATG
 TCAAACAGG AAAANCCATA GTATTATAGT TGATATGAAA TGANGATTAC ATACANCAGT AATACAGAGN AAACATGAAG
 CTGCTTATAT TTATTTGGGN ATAAGGNCAN CAGGGGCCAA TGATTTTCAC TGCAGATGT

SEQ ID NO:425: (Length of Sequence = 448 Nucleotides)

TCCACAGGGC GGCTGGGGT CTGGAGATGG GCGCTGGGCC CACGGGACGC AGATGGGGCC ACGCTCTGCC CGTGGCTGGC
 CCAAGTTCCT GGTCTGCACT GCTGCCTCCT CCCAGCACCC CCTGGGGCAC AGAGGGCAGG GTCACAGCTG GGAAGAGGTG
 GGGGGTAGAA ACCAAGGCTG GCAGAAGTNT AGCCGGGCTC CCTGATAAAT GCTGGAGGAC CCCAGGGCAC CTGCACCTAC
 TGTACCTCT CTGAGAGCAT TTGTATGATC TCATGTCTCA GCTCTNNGAG GCTGGAGGTC CCAGAAAACC AAGGTATGGG
 TAAGATTGAG TCTCTGGGTG AGTACCCAGT TNCCTGGCTC TAGATGGGCC CTTTTCCTCT GTGTGTCCTC AAATGATTGG
 ATGAGGCCAG GTGCTCTCT TGGAGTCCTT TCTGTAAAGG CAACTGAT

SEQ ID NO:426: (Length of Sequence = 417 Nucleotides)

GCCTGNTCA TCGCTGCTCT TCTCTCTTG TCAGAGTCAG TGACACTGAC ATTAAGGTCA TCGAATATCA ACCAGGTCCT
 GAGGACCTTG GTGTGTTTCC TCTCTCTTA GTCTCCAGAC CCCAGCCTGT TCATCTCTGA GCTTCTCTG GCACCCCTTC
 CTTGGGGCCA AGCCAAGTAA GAAATCAGCA GGCCCAAGGT GGTGCTTGGG AGGCCGGGGC AGTGCCAGGG GCAGTCTCTA
 TACCATCTTC CCACTGGCTT CCTCTCTGCC TGCTCTTAGC CGCCACACAT ATCTCAGCTG TCGAATCCGA TTAGGGNTTC
 TGNCCAGTGA GCCAGACAAG GAGGCCACTN GGCAGGGGAG AGAGAGACAA GGACGCCAAG CAGGGATTGG CAGAAGGAAG
 GTGGAGACAT GGCTCAA

SEQ ID NO:427: (Length of Sequence = 317 Nucleotides)

AACCCGTGCT CTACTAAAAA TACAAAAAAT TAGCTGGGCG TGGTGGTGGG CGCCTGTAGT CCCAGCTACT CGGGAGGCTG
 AGGCAGGAGA ATGGTGTGAA CCCAGGAGGC GGANTGTCAG TGAGCCGAGA TAGTGCTCT GCACTCCAGC CTGGGTGACA
 GAGCGAGACT CGTCTCAA AAAAAGGGCT GATAATGATA AACAGTGAGC ACTCCGGTCC TTTTCTTAC GTTTCTCTT
 TTTCTTCT CTCCACCCA CAAGTTTGC TTTTAAACCA AGGTGTCTCT GCTTGATGGA AATTCACATG CTAGTCT

SEQ ID NO:428: (Length of Sequence = 296 Nucleotides)

GTAATTACAG TATTINACG TAGAGACGGG TTTCTCCATG TTGGTCAGGC TGGTCTCGAA CTCCTGACCT CGGGTGATCC
 GCCTGCCTCG GCGTCCCAAA GTACTGGGAT TACAGGTATG AGCCACCGTG CCCAGCCGGT TTTTTTTTTT TTTTTGTAT
 AGCAATGGAA GAATGGCCTC GTACACACGN TAGAGTGGA AGTCCAGGC ACCAAGGNTT CCCACCCTAG AAGCAAGCTC
 AGGGCTTTCT CTTATCTT CCAGGGAGAG CACTGAGAGA TGATGGGGGG TTGGCA

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SEQ ID NO:416: (Length of Sequence = 343 Nucleotides)

GTATTTCAAG TGTTTTATTT GCTTTCGTG GTGTCAAATT TGGGGTCTCC TAGAGCCCAG CCCAGGCAG AATCOGGCAT
 ATCCTTCTCC GCCTGGGGG CCCGGGACAC AGGAGTTTCA GAAAAGGCAC TGGCAAAAGT NCTAGGGCGG GGGTCAGGGA
 GAAGCCACAC TGAGCCTGGA GGGACCGGC CCTCCTTCGG CGGCAGAAAA CACAGTCACC TTTCAGGG AAGGGTTTTT
 NCCTAGAAAG AAATTTAAGA CAAGATAAAA ACCTGAGATG TTAGAGGAGC CCCAGAACC AAGCOGGTGC TNCCTGGGC
 AANCAGAGAG TGAACCGGC TTT

SEQ ID NO:417: (Length of Sequence = 202 Nucleotides)

TATTTCTCTG TGAAAAGGG GAAAATAAAA GGAATAAAT AAAAAGGCA CAGTTGACAC ACAAAAAAA ACCAATGATG
 GGGAGGACGG GAGGTGGAGA AGTAAATGGG GGAGGGGNTC CCATTACAGC AGCAGGATCC AGTACCCGG GATGCTCACA
 TCINTCCCTN ACGTGGGCGG TGTAGCCCT TCTCCCAAG GT

SEQ ID NO:418: (Length of Sequence = 299 Nucleotides)

CACCAATTGG CTGCAGAGCT GTCTTCAGGA TCATAGGCCA CTGCCAGAGT CTTGGAGAGA GGGAGAGATG GAGAGGAAGG
 GAGTGAGCTT CGGTGGTCTG ATTTCTGGCT CAACGAGCA GGAACCTCAG GTTCAAAAGC AGCTGACAAG AGCCAGAGA
 CCGTCTTCTT GCGTCCGGC AGAGCCTTCT GGTGGCCCGA CACCAGGCA NGGAGGGAAG GCCCTGAAAT CCGTTTTTN
 TGGCAAGATT NGTTTCCAAG AGGAGATAAT GGCTCAATTT TGTCTTCCA AGTTGATCA

SEQ ID NO:419: (Length of Sequence = 223 Nucleotides)

ATGTGTGGGA AGGTAACTT TTCCATGGT TTTNATTTN CCCAAAAGTA TTTATGTAAT GATTATTTG GNTCTGACTC
 AGGCGACGTA CTGTAAGACG ATATTACTTT AATCATCTC ACATCAGTAT TTATGGAATA GCCACAGGTG CCTCATCCTT
 TAGTAGGAGT TAATTATACA TTINCTGGCC GAGTAAACAT NTCGAATGG TATGTATGTA TTT

SEQ ID NO:420: (Length of Sequence = 406 Nucleotides)

TTTAAATATT AAGTAAAGTA TATAACTTGC CCTATGCCAT ATTGCTTTAA TCAGGGGACT GAGCATCACA TTTAGATTTG
 ATGAGTTTGG GAAAAGTTCT CAAACATCCA GACCATGGA CCTTAAGAAT TACTGCAGAA ATCTCCTTCA ATATAGTCAT
 AGGGAGCATT AATGCTTTTG TGGTACTAAA CATATTTTIG AGCTTAGATA CAAATCCTC TTGTCTGAA CTGATAGGGT
 AGGAATGTGT TAGGTGCTTC AAATCCAGAT CTTTCAGGGG TTGCCACCTA AACTCATCTT TATGAGTAAC TCTAGATAAT
 AATACACTTT GGTATCTTCC AAAGTGCTTA TCTAGGCATG GAAAAGTTCA GTAAATTATCA TGAGGNCCTG TTTTLAGGTT
 AGGTCC

SEQ ID NO:421: (Length of Sequence = 281 Nucleotides)

ATCCAGATTA CTGACTTGTA CACAATGGAC CATATGINCT GTCCAAAATA CACCTACATT AACTGTGTG GAACANGAAC
 CTGGGCTTTG CAAAAAGAA TTTATGATTA AAATGTAAAC CCCCCAAA AAAAAATGAAG CTTAGAATTA AAGGTAGCCT
 TTTACCCAGA TTGTTCACCA GNTTGTAATA TTCTAATATG GTTCATTAAAC TGTTTCAAAA TAATTCATAT TTGNCCTTAT
 GGTTTAAGGG CTCCAGATTG AAAAGGTGCT CTGAACCTCT G

SEQ ID NO:422: (Length of Sequence = 220 Nucleotides)

TTTGTATTTT TAATAGAGAC GGGGTTTTGC CATGTGGCC AGGCTGGTTT TGAACCTCTG ACTTCAGGTG ATCTGCCTGC
 CTGGTCTCC CAAAGTGCTG GAATTACAGG CTTAGCACT GTACTGTCT GCCTGGCTGG CTGGCTGGCT GGCTTTCTTT
 CTTTCTNPTT TCINTCTCTC TCTCTCTCTC TCTTCTTCTT TTTCTTCTT CTTCTCTCC

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SEQ ID NO:409: (Length of Sequence = 233 Nucleotides)

AAGAGACAGG GNCATATCT GTCAACCTGG CTGGACTGCA ATGGTGTGAT CACAACCTAC TGCAGCCTTG AACTCCTGGA
CTCAAGCANT CCTNCCACCC CAGCCTCCTG AGCAGTTAGG ACTACAGATG GGTGCCACCA TGCCAGCTA ATTTCTAAAT
TTTTTTTAGA GACAGGGTCT TGCTATATTA CCCAGGCTGG TCTCAAATC CTTGGGCTCA AGTGATCCTC CTT

SEQ ID NO:410: (Length of Sequence = 295 Nucleotides)

GACAGGGGT GGGGAATCT ACTCCATGGT ATCTTCAGAG CTAGGATAAT GCTCCTTATG CAATCCCACT GCATATGACC
ATGGCAGTAG AACAGTTCA ATTACTACAC TGGATGCGTT AAGTGTGCTT TCCTAGCAGA AAGCACCAGG GTGGAGTCAA
CAGTTCACAT GCTAATACTT GGAAGTATTT CTAGAAGGGG GTGCTCAATA GAGGGCAGAC ATGATGCAAG NNCTTCATAC
TAGAAAGGTG TCTGTGTGT GCATGCACAG CTGGATGGGG GCACACAGGA GCAAG

SEQ ID NO:411: (Length of Sequence = 304 Nucleotides)

AATAAAGA CCATTAATCT AAAGTGGTGT TAAATGCTTT GTAAAGCTGA GATCTAAATG GGGACAAGGC AGGTGGAGGG
GAGGCCAGTG TACATGTAAA TGCCACAGC CCAGCATGGG GTTTCCTCC CAAGNCCCA GCACCAACCT CTGAGCCCAA
GACCTGCTT GAAAACAAGC AGATACCGAT TGNITCATCC TATTTATGGA CATGTAGGTC TAGTTGCATT TTCCTNGGG
GGAGGGGGGA AGGTGAATTA TGGTAACTTT TAATGATCTA TTCAGGCAGT AGAGCTCTTA AGGG

SEQ ID NO:412: (Length of Sequence = 250 Nucleotides)

CAGGTGGCA CTATCACGCC CGGATAATTT TTTTGTGTTT TAGTAGAGAC GGGTTCCTCA CATGCTGCTC AGGCTGGTCT
CAACTACCGA CCTCGTGATC CGTCCACCGC GGCTCCCAA AGTGCTGGGA TCACAGGCGT GAGCACCNT CCTGGNCACA
GGTNGAGACC CTTTCTATAT AAGAAAGAGA AAAATGTCTC TNANTCACA GAGAATGCTA ACAACGGGG AAAGCACAGA
CACAAACCTG

SEQ ID NO:413: (Length of Sequence = 337 Nucleotides)

GTACTGGGAC AAGGGAAGGC AATCACAAC AACTGCCCTC AGGAAGAACT CAGTCCCTGA CTGTAGTGTG TCTTCGGGGG
AACTAATGCC ACCNCTCTC ATCCCCAGA CGGGCGAGGG GCTGCACCTT TAAAGCAGGC CATTTGGGCTT TCCGGGCTCC
AGGGCCAGCC CACCCCGTTC CCGCTGGTGG ATCTTCTGTT GCTGCAGGAG GTGCTGCTTC TGGACAAAGC TCTTNTCACA
CTCAGTGCAG CTGTAGGGCC GNTCACCCGT NTGGATGCGC TGGTNCAGNA CCAAGTCAGA TGGGTGACTG AAGCTCTTGC
CACAAGTAAC CACAGAT

SEQ ID NO:414: (Length of Sequence = 304 Nucleotides)

GGTTTAAGAA CTGCGTTTIG GNGCCCAATC TTTGGTGAAA AATATTTTIG GGTCACTTTT GAAAAAATC CTTTCAAGG
CAGACAGCAT TTTAATGCTT TGTCTGTTTT TCCCTGTTTG TCAGCTCTGN CACCAGCCTG AAAGATTAA AAATNCAAT
TAATGGAGG TTTATTTGTC TTTACTCAGG TCACATTTCT GGGTTTAAAT GAAGNGACAG ATGCTGCTCA TATACAGGAT
TTAGCTGCAG TTTCTTTGGA ACTTCCAGAT ATTCTGAATT CACTCCACTT CTGCAGTCTA AATG

SEQ ID NO:415: (Length of Sequence = 315 Nucleotides)

CGTTGTGGAG TGGGTGTCTT TGGATAGAAG GAGTGAGGAA CTGGGGGAGG AAGGCCTGGG GGATCCCTTG GCGGGGCTAC
TTCTGGGGCC CGGNATGGAC AACTGGNAGC TGCTGCGNTT GTTGGGGTCC TGGCAGGGGT GTGGTGTGGC CCTCACCCT
CTGNTCACCT GCTCCTTCT NACAGTGCTT GGAGAAGTTC CCTGTNATCC AGCATTTC AAGTTCGNA GCTTCTGCTC
CATCCATCCT GTCACGTGGG GCTAGGAGGG GNCAAGCCGA AGAGCCACCC ANGNACANT TCTGTGCTT GCCTT

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SEQ ID NO:403: (Length of Sequence = 416 Nucleotides)

AGTTGACTGC TCTGATATGG AGAGACCTGT TAGTCTTGTA TATAGTGCCC AGCCGGAAAA AGCATCTCTT GAAGGTTAGG
GCATTTTGTG AGGAGAGCTC TAGGGCTATA TCAGTCTGGA GGTATGATCT CTGATAAAGA TCATAATTCT CATCTCAGTA
ATCTTCTTTA GAACAAAACA TTCTTCATTG TAAGCTTCTC ATTAACTGAA GGCCACCTGA TCTGAGATTT TGGCTCTTAG
AATACTCTTT NCTGTGTCTC AATCCTCATA TGGCTTAOCT CTGAAATATA GAATATATTT CCTTGTGTAG CCTGGTAGAG
TTGGGTTTTG TTTTGTTTTT CAAACAGTAA CTTTATTTG ATTGTAAAC TTCCAGATTT CTGAGATGCC GCCTTACCAG
TCTTAAGGTT GATTTT

SEQ ID NO:404: (Length of Sequence = 368 Nucleotides)

CCTCINACTC ATGTGTATGA GTAGGCGGA GGGCTTCACT GCCTCANTTT CCCCACCTTT GGACCTTAAA TCCTCTCCTG
ATGCTCTCA GCCCAGCCAG GAAGGAGAGC TAAGACCAAG AGGGATTTAA CAGATGCAGG ACACACAGCC TTGTCTCAG
ACCCCCAAG TCTGAGAGAA GCAAAACACT CACCTTGAGA GCCCTGGAC TTGGAGGTGA GGTGCAGAAC CCAGGCTGGG
TGTGTCTGA GGGGTGGTGG GGGTGGGTGG TGTGGGTGG CTGGCTGGG AATACTTTC TTAAGCTAAG GCTGGGGCTT
AGGGGAGGCG CAGAGGAAGG GTAAATAGTT TGCTGGGGG GGTGCTGG

SEQ ID NO:405: (Length of Sequence = 395 Nucleotides)

GACAGGTCTT CACTCTTACC ACAAGCTCA AGTCAGCTTG GCCTCTCAAG TGGAGAGATA ATCGTTCTAT AGCAAGAAGT
ACAAAGATTC TCTGCAGACA AAACCAGCTA GCCAAGGTTC CACAACATGT GTACACGTAT AAGTCTGNTG GATCAGAAGA
AATATGTACC CCGGAATCAG ATGTAGCCAG CCCACATACT AACAAACATC AAAGCAAGCC TAGTCAGATT GAGTCCCAT
TGAACAATCT TTATAAGGT TTCTTCATGT TATTACAAAT TCAAAGTAAA TTTACTTTAT AAGCAGCTAG GGAATTCTT
TATTAGTAA TGTCTAACA TAAAAGTTTC ACATACTGG CTTCTGTCCA AACCATGGAT ACTTGAGCTT TGTGG

SEQ ID NO:406: (Length of Sequence = 358 Nucleotides)

GATACCTTAA TCTAAATTTT ATCTTAATTT TTATTTTAT TTCTGTCTT AAATTTTAT CTAAATTTT TNCCTAGCTT
TTATTACACC AAGACAGCTT CACATTTTAA TTTATATATT GTACATCTCA TGTAAAGNAT TACCGTATAT AAGCTAGTGT
CATAACTTAA GTAGCCACAT TCATTCACTA TGTTTTATGT TTCTCTCTG ACTGGATCTC TGATACATTC TTTCTGTCTC
TAGCTGCTTT TATGCAAAAG GGCATTATAT GTTTGTCAAT CAACCAGGCT TCTGTGACTG TTTAGAAGGA ATTATGTAAA
TATATAATCC NGTGGCTGT TTACATTGG CCATGTTT

SEQ ID NO:407: (Length of Sequence = 294 Nucleotides)

CTGTGTATAT TTAGTATCTT TNATTAGAA GACTGGTGA TATTGGCTT CAGCTAATTT ATAGAAAGGA TGATCATCAA
TGTCTCTAGT TTTCTCTAA GTGGCTGTG TGTGCAGGTA CATATAAAAA TNCACTATA CAAATAGCTG GACAGTTGAG
TCTCAACTAT GAAAATCTTT TCTGGGATCA AGATCTAGA AGTTGGTGTG TGTATGAGTG CAACCCATCA TTCTATCCOC
TAAAAATCTG GGGTTTCTCA GCCCAACAT TONCACTAGT AAAGTCAAGT TTCA

SEQ ID NO:408: (Length of Sequence = 367 Nucleotides)

GGCAAGGAAA GAGAGCTTTA AATTGAAAGG TTAATTTCTT AAGAGGAACC TGGGCTGAAT GACTGCAGTG TTATACCTC
CAATCTTTC AGGTGGGCAT GGAACACTGC TTGTATCACT CTGTGCAGG TATAAATCCA TATATCCACA AAAACACACA
TCCATCCATC AACATATACA TGGTTTGGGA TGAGCAGGTC AATAGTTTTC AGAGGGAGTT TGTCCTTTT TTTTCTCAT
TATACTCTTA AATTGTGTG AGTTATCAAA CAAACAACA GANAATTTGT TTGGAAAAAC CTGTGCATAG CCTTTTCTTA
TCAAGTGCTT TAAAATATAG NCTAAATACA CACAGGCTTG AGGCAGA

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ACAAGCTGTG TGACCATAGG CAAGTTTGAC CTTTCTGAGC TGCCATTTTC TCATGGTAAA AGAGAGATAC TAGAGGAACC
 TGCCCTCAGAG GATTGTTCATG GAGAATAGAG GAGATGATAC AAGTGAAGCA CTAGGCAGCA CCATACCTGG AACTAAGGGA
 AAGCCCGCAG TCAATGTTC GATTGTTC ACTTGCCAGA TTGTGAAGA GGCAGGCAA CCCTTGAGTT GAGCTCAACG
 CTGGAGCCAA GATCAATGAC AGAAGGATTT TGTTTTGAAA CAGCAACTAA TGACCAGAGA GAGGAAATGG GTCATGAAGC
 TCCATGGTGC CTTTCATGAA AATGAAATGT AAGGGCGTGA TTCAGGAAAA AGGGACCACG ATCAATACCA GCAGACTCTT
 CCTATGCAC TGGG

SEQ ID NO:398: (Length of Sequence = 400 Nucleotides)

CATCAAGCTG GGAATGCCCT AAAGTGGGG CGTGAGGAAG AGAAGGGGTG ATACCTAGAG GCTGGGGTAT CTCTGTCCCA
 AGGAGACAAA CTATAACAAG ACCCAGCAAC TGAAGGGTGA ACACCTAGCA CAGACGTATA CCTCCAGGNT CCTAGCTGCA
 TTTCTAATTC TGCTTCATCT ATGCTTGAGC ACTACTTGTT GTTAAATATA CTTAATATCA CTCTTAGCTA ATTTCTCTTA
 TGTAGATTTT TATTTATTTT TGAGGGCAAC CCAACTTCCA GGCTCTTGA AGGAAATAGA CTGCAGCCCC TAAGTGTGAT
 CAATACCTAA TTATAACAAT AATCACTAAT AATAACTTGT GCTGCTTCAT TGTAACCTAA ATGTACACTT TTACATTTT

SEQ ID NO:399: (Length of Sequence = 324 Nucleotides)

AAATATTTAC AATTTTACAC CTTGAGGAAG GCTCCAAAT ATAAACACTG TACCTCTCCC TAGAGAAAAA AAAATTATTC
 TTCTCTCAA AACAGGAAT ACATTCATTT TTCTCAGT TGTTGAATCAA GTAAATATAC AAATAACAT CTGAAACATT
 TTCTTTTAA ATATATTTAT ATAATATATA TTNTAACAG CTTTACAAAT AAAGGCAACG GTCCCTTCTT AATTTTCATG
 CCTCTCAACA GAAGGTACA TGATGCTCCC TGAATTCAG GGTATTTTT TNCTCTCTAT GGTACTTTGT ATTTCACTTT
 ACTT

SEQ ID NO:400: (Length of Sequence = 388 Nucleotides)

ATTAAATCTG AGTTTGTGTT GAGCATCTTT CAACATGTAC CATATTTATG ACAATCTCTT TCCATAGGAT CTATCTGTC
 TGCAACAAGT ATTGATCTTA CAGTAAATTT TTTCACAAAT TCATTAGATT CTATGTCTCT TTTCTGCTA GGAATTTTGT
 TGCAGGTAGC TATCTCTTGC CCTAGATTAT TCTCCTTGTT TAGCTCTCTA TTCTTAACT GGCTCTAGA TTTCCAGATT
 TCTTCGGTA CAGACTTTCT CTTTGCAAGT NCTTCCATCT CTAATCTTTG AGATTATCT TCTTTTGAAA TGTCTGCTG
 CTCTACTCTT GTATGCTTG GNCACGTT CAAGCTTCCC ATCTAGCAAA ACCAGGGTTT CTAATATT

SEQ ID NO:401: (Length of Sequence = 339 Nucleotides)

GTITATGCT CAAAAACAAG AATTCAGAAG CAAAGGTGA GAGACTGTGG GTTGGGAGA TGGCAGGAAG GGGGCAAGG
 CTGTCCAG CTCTCCCTT TGTCCTCTT CTGACCTCC TGGCCGAGT CAGGCCTAGG GCCAGGCAT CTGGAGGGG
 GGCACCTTG TGGCCAAGG AACAGTAGAG CTATCGGGG CAGTCCCTGA GGGGTGCCCT GGCAGGAGG GGCTGCAAGA
 TTTCAGGA GGCAGAGTTC CCTCCAGA ATCCAAAGC CGGTAGGGG GGGGCAAGG CCCCTCGTTT GSCAAGTAC
 AAGAGGCGC TTTTGGGG

SEQ ID NO:402: (Length of Sequence = 400 Nucleotides)

TGTCAGTGT ATGAGGAGT CCCAGCGAGA AATGAAAGT TCTATGTTTA TGAAATAAA AAGGAAGCAT TGCAAGCTGT
 CAAGATGATC AAAGGGTCCC GATTAAAGC TTTTCTACC AGAGAAGAGC CTGAGAAATT TGCTAGAGGA ATTTGTGATT
 ATTTCCCTTC TCCAAGCAA ACGTCCCTAC CACTGTCTCC TATGAAAACA GCTCCACTCT TTAGCAATGA CAGGTTGAAA
 GATGGTTTGT GCTTGTGGA ATCAGAAACA GTCAACAAG AGCGAGCGAA CAGTTACAAA AATCCCGCA CGCAGGACCT
 CACCGCCAAG CTTTGGGAAA AGCTGTGAG GAAAGGGAGG AGGAGGACAN CTTTCTGAC CTATCTGGG AGCAACCCC

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CCACCCCTGC AGGNTTCAAA GGGCCTGCTT CCCACTCCTT GGCCTTTCCC TCCTCCTGGG AACCATTCTG GGGCAGAGCA
AAGCT

SEQ ID NO:392: (Length of Sequence = 371 Nucleotides)

ACATCCACAC AAGTACAAGA ATACAGAAGC TTCTCTAGTC AGGATGCACT AAGCACCTAA TGAGTAAACA AACITCAGCA
TATCCTCAIT GTTCTCATGG TATTAAITTG AAGATACTTA CCTCGAACT AAATCTGGTT TTAGAAGAGC TGCTTGTTGT
TCAGCTCCAA CTGGTTGGGA TACAGGCTGT AAACAGTACA GACATAAAAC TTGCTATGAT AACAGTAAAA TTCAAGCTAA
ATATACAATT TGTTACTATT CAGAAAACAC GATAGTTTTG GTTACCTTGC AAACCTGGTA GGAATATCTA TGTTATTGAA
TGTCGTATC AATCCTATTA TTAACATTAT TACCAAAGGT AAATAAAATT T

SEQ ID NO:393: (Length of Sequence = 404 Nucleotides)

CCTTTATGTA GCTTCTCTGA GGTGAAACCA CTTCTTTTIG ACCATCTAGC GCANICINTC TTTACATCAA CCATTIATTT
CAAGTGTAGT GTGCTTCAGA GTCGAAAGA GCTATTGCAG AATGGCTGT TGTGGCTTTC TATGGACATT CACATGAAAC
CTGTACAAA CAGTCTCTA GAGACAACTT TGGGTGGATC CATGAACCTT GTGTCTAAAC TGATCCACTA TGTAGGGTGG
CTATCCACTA CTGCAATGCG CTGGAGAGC AACAACTT TCTTGCTGCA CTTIATTTTG GATTTCTATG AGAAGGTGTG
TGACATATAT ATAAATNATA ACCTTCATT AGTGGGTATT GTTCTCTCT GGGGATCCTT CTATCTGCA CTCTCAGCC
TGGG

SEQ ID NO:394: (Length of Sequence = 416 Nucleotides)

GCCACACACT GGAGAGGGAG AGCTAGAGAG TGAGACAGCA GGGGAGCTGA GGTGAATGG CTGCTGTAG AAGCCCTGGA
GACAGCCTGA GGTGAGAGCC CAGCCCCACT CCTGGCTGTG TGATCTTGAG CAGGGCTGTT AACTTCACTA GGACTTGGTT
TCGGTTTCTC ATAGAGAATA GGTACAGTGT GAATTAATA TATATAGCTT GAATAAGTG CCCAGCTGT GGGTAGCTGC
TGCCATCATC ATCACCATCA CCATCATCAC CATCACCATC ATCATCATCA TCATCATCAT CATCATCATC ATCATCATCA
TCTCAGGCAC AGGGGCTTTA AGGACAACAT GCCAGTTTA AGGANGAACA CAACTCTCTT CATTTATAGC GNCCTTCAT
CAGTGTAGT ACGCTT

SEQ ID NO:395: (Length of Sequence = 315 Nucleotides)

AGAGATCAAA TGTCTTAAAC ATTATGGAAT AGGAGTGTAT GACTGACTAA CATCCAGTAA TCATTAGGGA AAACAAACAT
GAGTGAGGNC AACTGAAATA ATTATGATAC AATTAAGGT GTTAGGTTAC AATTGTATAG TTCTTTAAAA TATGCATTAT
TCCACATGAT CAGAAATATA AAANGANTTA GACAGATACT GTTAGAGAGA CAATTAATTT AAATTGTGAA CATATTGCTT
GGNGCAAGCA TTCAAGTTGA GTGCTTAATG TGTATCGGTG ACTGCACTGT GCAAATAAAT TTGGGGTAG TAAGA

SEQ ID NO:396: (Length of Sequence = 409 Nucleotides)

CTCCAGTTCT CACGTTAGGG TGCTTTCTTC CCGGCAGAG TTTTTOGAGC TCATGAAGGT GGACTGCCTG GAAAGTACTC
TAGAAAAGTC ACTCCAAGCA AAGTTTCCTT CAAATCTCAA GGTCTCCATT CTCTTAGACT TCACGGGGG CTCACGAGGC
CGGAAGAAGT CCGGCACAAT GCTGCTCCCA CTCTGCGGA GGTCCCGA GCAGGTCCGA GTCTCCCTCT TTCACAAGCC
GCACCTCCGT GGGCTGCTTC GGCTCCTCAT CCTGAGGCG TTCAACGAGA CCATCGGCT CCAGCACATT AAGGTGTACC
TCTTCGACAA CAGCGINATC TTGAGCGGTG CAAACCTGAG TGACTCCTAC TTTNACCAAC CGTCAGACCG NTACGTGTTT
CTGCAAGGA

SEQ ID NO:397: (Length of Sequence = 414 Nucleotides)

GTGACAAATG TTAAGAAATT GTGTGTCAAG CAAAATACTT TAGAGGCCAA TGGGCCACAT GTTTTTAATA TCAAGAGATT
 ACACACAAAA TTINTTTTCT AGCTTCTTTT GAAAAATCAG AATTGGGAAG ATGTATTCAT GAGTGACTGC TGCCCCCTTT
 GGTGGGACT CGTTCCTTCA GGTTCATTAC ATGGTCATCA ATAACCATT CTTGGTCCC TGCTTTTGTC TTGTCTGNC
 TCTAAGCATT TGAATTTTGA GTATTATAAG AAACTTAAT ACTTNTCTAT CAGTCACCAC ATACATGTGT TTCTATCTGT
 ACTACGCTT ATTAAAACN TTTTATCAAT AGCCNCCATT TTGGAGGGGG GGATTTCAAC TGGTGCCTNG ACTAGCAAGG
 AATT

SEQ ID NO:386: (Length of Sequence = 267 Nucleotides)

GTCTGTGGA CATTTAAGTG GTATCTTAG AGCAACACA GAGTGGTTC ATAAGCTGCA GTGTTTTAGT ATCGGTGGGA
 CTGTGGCATG GCGTAGAGGA GTACAGTCG CAACTGATG GCCAGCTCT GACCTCCAG GCAAGTGGAC TCAGAGGAGT
 ACCAGCAGAT CTTCCACAT GCGTCGGGA GGCCTCTGG GAGAGTCAGT GGCAGGAGA GGTTCAGCTG TGCAGGCTCC
 AGGGCCAGC CCGTGCTTT CCCCCT

SEQ ID NO:387: (Length of Sequence = 384 Nucleotides)

ATTTTAAATG ACATTTTATT TAGGCCAGGG GACCAGGTAA CATTATTTTT AGGAGGAGAG CAAAAGGTGT TATATTACTG
 CTTCTAATTA CCTAGAAGGA AAGCATTGTC TACACTGCCA TTATGATTGG CTGCAGCAGT TCAACCTGGC TCTCGGAATC
 TGCCATTAGC TTGACAGCAT ACAGAGCACC ATATCAGGGT TACTATGGGA AGACTCTATT GTGGCATCAG AAACACAAAA
 AACACTGGAT ACAGTTAGTT TCTGTGACA GTTCAGAAG AAAATCCAC AGATTGGACA GGCTGCCTGC TGAAAGGGTT
 GTCACTACAC ACAGCATGCC CTGAACCTG GGAATGAAGT TACCCCTATC TGTGGTGATC AGGA

SEQ ID NO:388: (Length of Sequence = 345 Nucleotides)

CTAAGATCAA ATGCAGGCAA AAGTGGTGAA TTTTACCACC TGTTTGTAAG TCTGGGTTTA TAACCTTACC GTAAATCACC
 TAGAACACAG GCTAGCCGAA TCGGGGTGTC TGGTATGGCA ATATCCGAG AGCTAACCTG GGGCTGGGGC AATGTTCTGT
 GGCTGCTGCA CTTGCCCTTA ACAGGCCAGT TTA AAAACGTC CAGCTCTCAG GGCCACATTC TCCAGGACAC AGCAGGGAGC
 TCACAGTAGC TCAAGACCCG GCCAGCCTC CATCCCCAGC CTTGGAGCTG TCAGTGCTCC CAAAGGCTGA AAGAATTGG
 TCTTGGCTGA GTGGACAGCC CCCTT

SEQ ID NO:389: (Length of Sequence = 156 Nucleotides)

TAACTGCCC CAGCAGTGA TGCAGGAAGA CTTCTGGTG CATGAGGTGA CCAATCTGCC GGTGACAGAA GNACTGATTG
 AGCGGGAGAA TGCAGCCAG CTCAAGAAGT GCGGGGAAC GCGGGGGNG CTGCAGTATC GGCCCTCAG GGGACT

SEQ ID NO:390: (Length of Sequence = 364 Nucleotides)

GAGTCTCGCT CTGTACCCA GGCTGGAGTG CAATGGCATG ATCTCGGCTC ACTGCAACCT CCGCTCCCG GGTCAAGTG
 ATTCTCTGC CTCAGCTCC CGAGTAGCTG AGATTACAG CAGTGCCAC CAGCCTGGC TAATTTTGTA TTTTCAGTAG
 AGATGAGGTT TTGCCATGTT GGCCAGGCTG GGCTCAAAT CTTGACCTCA GATGACCCG CTGCTCAGC CTCCAAAGT
 TCTGGGATTA CAGGCATGAG CCACTGCACC CAGCCCAACA CTGGGATTCT TTTATCCGCT GGCTGGCTCT TCCGAGTTG
 AATGTGTGA CTTCTCCCC TATCTGAGG CAGTTTTTC TTCA

SEQ ID NO:391: (Length of Sequence = 325 Nucleotides)

GAGTGTCCAG ATGATGGCAG TGATGGCCA TCTGGAGCG CTGCTGTAAG GACTCTGGCT GCAGCAGGG AGGCACAGCC
 AGGCTGCGC ACTAGGCAGA GCTGGTGTG GAGCCAGGAG CAGATGAGAG CCCCCTTC TACCAAGTTG GCAGTGAGA
 AGGCCGACT CCGGGTGCT GATGCGAGT TCAGTCCAG ACCCTGGCAT CCTGGGCTN TCAGGGGCC AGGAAGCCCC

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GATCAAAAAT TTTGGGGGTG ACCCTGGGCA ATATGGGCTT TAATAAGNCC CTAGGATGGG TTCTGATGCA TGCTCCAAAT
TTGNGGATCA TTGVINCINT G

SEQ ID NO:380: (Length of Sequence = 311 Nucleotides)

ATTTTINAGAT GGAGTCTCAC TCTGTGCCC AGGCTGGAGT GCAGTGCCAT GATCTGGCT CACTGCAACC TCCACCTCCC
AGGTTCAAGC AATCCTTCTG CCTCAGCTTC CCCAGTAGCT GGGATTACAG GCACCTGGCT AATTTTTTTT TTTTTTTTTT
TTTTGAGATG AAGTCTTGCT CAGTGGCCAG GNTGGAGTGC AGTGGTGTGA TCCTGACTCA CTGCAGCTC TGCCCTTCGT
GTTCAAGOGA TCCTCTGCC TCAGCTCCT GAGTAGCTGG GACTACAGGC ATGCACTACC AACTTAGCT A

SEQ ID NO:381: (Length of Sequence = 442 Nucleotides)

AATCTGTGAA CATATATTTT NATTTATCTT AAATACCTAA GAGTGAAATT NTGGTTCAT ATGTGGGTAT ATATTCAACT
TTGTAAGAAT CTACCAAAAT GATTTTCCAA GTATATGTAT AATGTTATGG TCATCAGANC TACATGATAG TTAGAGTTGG
TTACATACT CACTGCAATG GATGACTTT CTTGTGATTC AGCTATCCCA CTCITAGGCG TATACCCAAG AGAAACTCAT
AATGTCTTG TGTGCAGCTT GTATGCTAAT GATTTTAGTA GTATTTTTTG TAATAGCCAN AAGGTGGAAA CANTGAAAC
TTTACGGAA ATGATTAAAT AATTAACAAA ATATTATATA TCTATATATG ATCCATTAAT CAATGAAANG GANTGAAGTG
GTATACAGA AACACCACAG GTTAACNTT GAAAGTATAT TA

SEQ ID NO:382: (Length of Sequence = 337 Nucleotides)

AACAGACTTT GGAGCCANTC CCATGTGAGT TTGAGTCTCA GAGTACTCT GGGCAAGTNA CTTAGGCTTT CTGAGACTCA
CTTCTCTCTT TTATAAATCA GGAAGAATAA TCCATTGCTC ATTGAGTTGT TAATNAGACA TAAATGAGAT AGTGTATCTA
AAATGTGATT TGTAAAGTCT AATACGNAAT AGATGCCTAT TTGAGTGTTC CTNATACTCA GGATGGTTCT TGGGATATAT
TTNCCCATGG AACAAAAAGC AGACTACTCA TGACCACTCG GATTTTATGT TCAGCCACAT TAGGGCTCTT ATGSCCTGAC
CTGAAGACCT ACCATT

SEQ ID NO:383: (Length of Sequence = 421 Nucleotides)

GTGAACTGA AGAAGACCAC GACAAACGAT CGCTCAGCCC CTGCTTTTC TTAGGTTTAC AAGAAATGCG CCGGTGGGGA
ATGAACINTT TCATTAAATA AACCTAATTT GTCTTGATCC ATTCCACTCT ATAATAAAC AAAAGATTTT NTAGGCAACT
CGGAATATAG CTCCTTTGAA AGTACTGAC ACCTTTAGAT AAGAATTAAA ACCAACCTAT GTAACGACA TAATCTTGAT
CINTTAATTT GTAAATATTG ACANTTINCT TTCTGCACAT TTTAATCTTA GTTCCCTTT TGATTTINCT GAAGGTGCCA
AATTCATT AACTNCITTA CAAGTCTTTG TAAAATTTTA AATGCATAAA GGGGGGTGG GGGCAGGGG ACCNCGGANG
TAGTTTAAAT TTCGGAAAGG G

SEQ ID NO:384: (Length of Sequence = 420 Nucleotides)

GGACTCCGTT CCCAAGAATA AGTTTTGCTT GGGCGGAAAG TATGTGGTTC ATCCGAAAAA AAAGAAATCA ATGATTGTG
GCAGTCTTC ATGTGCTTTT GGGCATTINC ATATCTTCTT TGGAGAAATA TCAATTAAGA TCCATTGCCG TATATACATA
TATTAAAT ATGGGTCATG TATTATGGCT CATACCTGTA ATCCCAATGC TTTTGGATGT TGAGGCGGGA GNTCACCTG
AGGTTAGGAG TTCGAGACCA GCTGACCAA CGTGGTGAAC CCTGTCTCTA CTAAAAATAC AAAAGTTAGC CAGGCATGGT
GGCATGCACC TGTAGTCCCA GCTACCCAGG AGGCTGAGAC AGGAGGAATT GCTTGAACCC ANGAGGCAGA GNTTCCAGT
GAGCTNAGGA TTGTGCCACT

SEQ ID NO:385: (Length of Sequence = 404 Nucleotides)

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CTTAGCCATA AAATGTTTGC CTAGAACAAAT GCCCTGGAGT GTTCCCTG AGTTTTCTTC TGGTAG

SEQ ID NO:374: (Length of Sequence = 278 Nucleotides)

GGGTTTTGGT TGAGGTTTCT ACCTCATAT CCAAGATATT TNCITTCAG CCAGCAGAAA GAAAAAGGAG AAGAGCTGCC
ACCCTTTGTA TCCAGGATGA TCTCTTNTG AAATCCTTGA TTTAATTATA TCTGCATGAC CCTTINCCCA ACTAAGGTTA
TATCCACAGT TACCGGGGGT TAGCACTGGG ACATCCCTTA TTTTANGAAC ATGTCTCAGA AAGTTGCACA AAAAATTCT
ACTACATCCC ATTGGCCAAT ACTTCTTACA TGATGACA

SEQ ID NO:375: (Length of Sequence = 321 Nucleotides)

GGTGACAGTA TTTTTGTGG TTTCTGTAGC TCCAGCCCCT CAGAAGGGAC GCCTACAGTT GGCAGCTATG GCTGTACCCC
TCAGTCATTG CCCAAGTCC AGCATCCTTC CCATGAAGTG CTCAAGGAAA ATGGCTTCAC ACAACACGTC TACCATAAGT
ATCGTAGGCG CTGCCTTAAT GGTAAAGAAGT GTGGGGGGCA GGAGATGAGC CTCTGGGCCC GTTATTTAGA CCCAGAGTAT
AAGAGTTGGG GGATACGGG ATAGGTGACT CTTTCTCTG ACTTCAGAGC AAAAAAAGA CATGACATTA TAGCAAGAAA
G

SEQ ID NO:376: (Length of Sequence = 337 Nucleotides)

GGAAATTTA CAGCATGACT ACATATGTTA GGAAAAAAT ATCTAAAATC AATTAACATA GCITCCATCT TAGGAACTA
AAAAAGAAG AGCAAATTAA ATCCAAAGTA AGAAGAAGAA AATAAATAAT AAAAATTAGA GCAGAGAGAA ATGAAATTAT
GAACAGGAAA TCAATTTTAA AAATAAATGA AACCAAAAGC TGGTCTTTG AATCAATTAA TAAATTTGAT AAGCCTCTAG
CCAGACTAAG AAAAAAGAGG TAGGGCACA ATTACTAATA TCATAAGTCA AAGAGGGGAC ACCCCTACAG ATCCCATGGA
TATTAAGG ATAATAA

SEQ ID NO:377: (Length of Sequence = 455 Nucleotides)

GTTACAATTG AGAAACATA TTTAATAAAT CATTGTCAAT TTINATAATG TTTCAAGCCC ATTCTTTGTT GATAGCCTCC
ACATTTATAT GGTAAAGTCA TTGTGTCTGT GTTTCCTACC TATGACATTA TTTINATATC CCTTCATTG TGGATCTTAA
GATGTTGCAG AAGGTTCAAT CCTGTACCCC AATACAGATT CACTTCCTTT AGCTGCCTTT NCTAGCACCA ATATGCTTTA
AAAAAAATG CGCAAACAAC AAGCAGTGAC AGCGGCCAAT TCCTCGAATG TCCAGATTAA TAACTGTAGC ATGCTAAAGA
AAGGTGTGTG TAAATAGCTG GAGATGGTAT ATGGTCCAGA GTCCAGCATA AAATTATTTT CTTCTGTAGG CATTCCTCTC
ATTCCCCTAA CCCGGATACA TGCATTAGGA ATGTAGCAAA ACCCTTCGGG GAACC

SEQ ID NO:378: (Length of Sequence = 349 Nucleotides)

GATGGTCAAG GGIGTTTATT ACTGGACATG CTCATGCTT ACTTGCTTGA AAACGCTCCA TTAGAAAATN AACTCTGAAA
ACTATATGCC CAATGCTAAT AGTGGGTATT TATTGGTAACT ACTCTTTATC AGGIGCTATG ATTGTTGATG GCTTTATTIN
CTNCTTCATA TTINCTATAA TTINCTACAAT GAACATGTAT GTATAATCAG ACAAAAAAGC CAAGAAATAT CCATAAGTTT
TNCITGTCAT TCATTCATCC CATAAATACT TGCTGAGCAC CTGCTGTAAG CCAGGCTCCG AGCGGCTGC TGGGTGGAGT
GCCGCACCCC AGGGAACGGT CAGCCCTCG

SEQ ID NO:379: (Length of Sequence = 421 Nucleotides)

ATTTTGAATC ATATTTTACT TATAGGTTTG CTGTATATAC TGATTAAACT TCTGAACCTA AAGATTCTCT ATAATTAAAC
TAGCACAAAT ATAATCTGTC CCTTACCCAC ATTGTAAGAA TGCTGTGGTG GGGAAATCCA ATATTGACCT TCACATTCCA
CATGGAAAAT CTTTGTCCCC AGAGTGCAAT TAGGGTGATT AAAAATAAGC AGCTTTTGTG AGTCTCAAGT TTGTCCCCA
AACAAGCAGC ATCAGCAACT GGAAATTTGT CAGACATGCA AATTATCCAG TCCACCTGA GACTTCAGCC CAGATCTATG

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AGAAGNCCTCT NGGAAGTGT GCTGTTTACC CTTTAGCAAA GNGNTACAAG AGCTATTAGT TGTAAATAA C

SEQ ID NO:368: (Length of Sequence = 370 Nucleotides)

ATTTCCCTTC TGCACTCGGT TCCTCTGCTC CCCATTTACA TGGTTTACTT CATTTTCCTC TTCATCCATT GGATTACACAT
GTGTTCTAGG CCAATATTCC AGNGTIGCTT GGAGTAAAAG TCCTCTTAAA TTCAATTTTG GNTCTGACCC ATCAGGGCTG
CTGAAACCAG CATCTTTTGC AGAAACCCAG GCAGCAAAAC AATCACTTTC ATCCAAAGTA ATAGTTAACA TCCCTGTTTT
TAAGTCTACT GAGAACCAAT TTGGCACATA CACCATTTTA AATCTTINCT TAATTTTCATC TTCAAAATCC ACTTTGCCCA
GATCTTCAAC TTTACATGGC TTCAATACAT CCAATATGN CACATTATTA

SEQ ID NO:369: (Length of Sequence = 315 Nucleotides)

GACAGGTATT CTTTGAAGT TTTTGTGTTA CTTATGTTTT NTCTCTTTAC ATCTCCTTGT GAATTTCTGT CCCATTTTGA
AGTCTCTCCT TGTTCTOGAC CAAGATCCCC TTGATGTTCT GTAGCCAAAG ACTGAGAAAA AGAGTTATTC TGAATGATGT
AGAGGTGAT AAGTCTGGTA AGAACTGTT GGACATACTC CAAGCAGCAC TGCAITGCAG TCTTTTGGGC TGTCTTCCIA
CTTGGGGTGT CTGTCCCCTG AGTGACTACG GAAGGGGTCT GGATGATGGT TTCTTCAGAT CCCACAGTGG ATGCT

SEQ ID NO:370: (Length of Sequence = 442 Nucleotides)

AACACTTTTA CACTGCTGGC CTAATTTGTA GATATCTCA AGAAGATTAT GAGTCATTCT CACTACCGGA ATCTGTTCTT
CTATTTTNTT TACCAATGGG TGCACCATG AATGTTGGCC ATCAAATAGC AAATACCCCTC TGCTGTATT TCCACTININ
GTTTTAACTG GAGCCTCAGC TGAAAAGGTT TATGGTGCTG CTATTCAGTT TTATGAACCA TACTCTGAGG AGAATCTCAC
AGAAAAGCAG AGACTTCTTT TGGGTTTAAC ATCAGCAGAT GGAAGTCTG ATAGTTCCAA AACAATTCAT ACTAACAAT
GCATCTGTCT TCTTTTCAC TGGGCTTTTT TTGATGGCA TTCAGGAAGT TTCTGACTTT TNCGTATCG TTAATTCAT
CTCTGGGGCT CATGTCTTC CAATGAGGA GGATAATTCC CA

SEQ ID NO:371: (Length of Sequence = 441 Nucleotides)

GACAAAGTCA CTCAGGTCT ATTTACCAT ACCCCAAAGT AAAGGCCCAA ACTCCACCGG GGCCAAGTNT TTCTGGNTCA
AAGTCACCAT GTCCCCAAGA GAAGTCTAAA GACTCACTAG TTCAAAGTTG CCCTGGNTCC CTCTCTCTCT GTGCAGGAGT
AAAATCTAGC ACACCACCAG GCGAGAGCTA TTTTGGTGTG TCATCTCTGC AACTGAAAGG ACAATCTCAA ACTTCACCAG
ACCACAGATC TGATACTTCA AGTCCAGAAG TGAGACAGAG TCATTAGAA TCACCATCTC TGCAGAGCAA ATCTCAAACA
TCACCTAAGG GAGGTGGTTC CAGGTCTTCA TCTCAGTCA CTTAGCTTGG CATCCAGATC TCCANTAAGG NCAAGATAGA
GGTGAGTTCT CAGCGAGTCC TATGTTGAAA TCTTGGAATT T

SEQ ID NO:372: (Length of Sequence = 362 Nucleotides)

GAGGTATTGT TGTTACTGGG AGGTGAAGG GAACACAAAT TCAGTTATAA GTCCTTTTTG AATACTAAGA GGGGAATAAT
TAGGGAAGCT AAGAGGGGAA TAATTAGGAG AAGAAAAAAA AACTTCAAAC AATTTTCCCT GTACATGAT TTTACTTGCA
TTTATAAACT GATTTTTTTT TCTAAGCACT CCTTTGATAA TGATTAAGTG TGGGGTTACA TTATTINAGG GTCGTCTAAT
ATTTAAGGTG ACTTAAAAAC CTCACACAG TTAATCCGA ACTGTGAAAA TTTCTCATCT TATCATCCCT CTGTTACTAT
CAATTTTCCCT CACGGTACAG ATTCTTTTAT AATTACTTCA TT

SEQ ID NO:373: (Length of Sequence = 306 Nucleotides)

ATTCTTTTGT CGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTTTTGC TGTGGAGTTG AGTTTCTTTG TAAATTCTGG
ATATTAGTTT CTGTTAGAT GAATAGTTG TGAATATGTT CTCCATTCA ACAGGTTGCC TCTTCATTCT GTTGATTGTT
TCCNTTGATG TGCAAAAAC TTINACTTAA ATATAGTTCT ATTGTTTTAA TTCTGTTTTT CTTACCCATG CTTCTGAGAT

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ATGCTGGAAG TGATTTCGTC AGCTCAGGAT TTTTTTTTAA AGCTACATTG AAAATATAGG TTTATTTTTT GINCAGGTTT
 TNCTTTTATA TTTTTTINCT GCACAAAGGA GGAGGATTTT CCCTTACTC ATATCGAGGC CAGATTTTTTA AAGCCAGCTA
 AGGCAGCATC AGCTGTGCGG GATTTAAAGC CTATAGCTCA GCTGAAAAAA AAGGTGGGGT GCGGTTTCAT GTAATGGGAC
 ACGATGCCCT TCTTGCTGAA CCACTGGAAA GAGCACAAGG AGCACATTTT CTTCTCCACT GCCCGCCGGA GTTCTCGCT
 CAGCTGAGGG GAGTCGTCTT TGGGCGGGGA TGGGATGATC ACTTTGTTGG GCTTNTCGCT GATGGTCTG GAGGCTGCCA
 AGAAGTTGAG GTGTAATACG CATCAATGTC CGTGGCG

SEQ ID NO:363: (Length of Sequence = 449 Nucleotides)

TGATTGAAG TAAGCTTTCC ATGCTTCACT TAGGGTGGGA AATTTTAAAT ATCAGAGCTT TCTTTGTTAG CAGCATATAG
 TTATGCAATT TATTTAAATC TGCAGTGCCA ATCTTTTTTT GATGGGTGTG CTTAGACCAC ACATTTAAGA TAATTATTAA
 TATGTTAGAA CCGAATATAT TTINATGATT AGTTTTTATG TGTCAATTG ACTGAATTAA GAGATGCCCA GACAGGTGGT
 TAAACATTA TINCIGGGTA TGTTTGAGG GATGTTTCCA GAAAAGGCTA GCATTTGANT CAGCAGACTG AGTAAAGAAG
 ATAAAGATAA TACTTGTGAT GTGTACAGGC ATCATCCAAT CTGCTCAGGA CCCCAATAGA ACAAAAAGGT GGAGGGAGAG
 TGAATTATGT CTACCCCTT GAGCTTGGGA CAGCCATCTT TTCATGCC

SEQ ID NO:364: (Length of Sequence = 282 Nucleotides)

GACTGTGTAA ATACACTTTA TTTTCCATTT TNCCCGCTG GCGACATGT GAACAGGCAG TGTGCAAAAT GGTGGCGGGC
 AGTGTAGGGG GCGTGTGGAG AGCCCCGTGG GTGNCITGCC CCGTCCCAG GCTTCGTAAC ACTGAAAAGT GGGCAGCTAG
 GAAGCGGGGA CGGAGCAGGG GTCCCCACCC AGGAAGCGCC AGGNAGATTN CTTGTAACGC TACTCTACTG GAGGCTCCGG
 GAGCACCGAG NGGGGCAGTC CCCAGGTCA TGAGGCCCGG GG

SEQ ID NO:365: (Length of Sequence = 349 Nucleotides)

TTCAAGCATT TCTCTGCTT CAGCTCCCA AGTAGCTGGG ATTTTCAGCAC CTGCCACCAC GCCCAGCTGA TTTTGTATT
 TTNAGTCAAG ATGAGATTTT TGCCATGTTG GCCGGGCTGG TCTTGAATC CTGACCTCAA ATGATCCGCC TGCTCAGCC
 TCCTAAAGTG CTGGGATTAT AGGCATGAGC CACCACANCT GNCITTTTIN TTCIGTTTCT AACGTTCCTC TTTTATTTCC
 CTATGGAGCA TCTACTGAGC CCCAGCGAG AGTAGAACA AACCTGCTGG CTGCTCTNAA GGCACCTATA GTCCAGTTA
 GGGGNGACG GGTCACTTAA CCCTTAGT

SEQ ID NO:366: (Length of Sequence = 366 Nucleotides)

ATGCAAAGGA ACAATGGTGT TGGCAAAGTC TTCTTTGAAT ATCAGAGACT GAGTCAATAA AAAAAATAGT AGAAAGGTGG
 CTTTTACTAT TGACAAAAGC CGGGGTCAAA AAAAGTAGTT TAAGTCTTAA GNCITGAATAT GCATTAAAGT ATGCAGGTAG
 CAAAGATGTA ATAAATTTCC TTAAAAAAG AAATTAAAGT TTTATTTAGA ATCAATTTTA CCNGTCATTG TAATTGACCC
 NCTGAGNAT TACAATAAGC AAGAGGAAAT TAAGGTGTTT TGCAAGAGCT GTATTTATAT TACNGNTTTT TAAAAACCAT
 TTTCTGAATT ATCGTAATTA AAGCTCTCCC AACTCGTTTA AGTCAG

SEQ ID NO:367: (Length of Sequence = 391 Nucleotides)

GCAAAAACAA ACAACAACAC CTTAAGTAC AGTAGTTCCA AAACACACTG CTAAAGTTAT GAAATAATTG TGGATCATTT
 CAAGTAAAAA TTATTAAAGG AGCAATAATT AACCACAAGG GGGCATATAT ATATATNCNC CTTAGATTCC AGCAGAAAGA
 CTAGTTTTAA GTAGTAACAT GCAAGTTGAA GTATTCTACA TTTTCAGTCA CTTAAACTTT CCTCTCTCAG ATGGCTACAA
 CTTTTTAATA TTCGAGGINT ATTTTATATC TAAGTAAAG GATTCCAGAA TACTCTGCC CTGCAAAACA GTAGTGTTTT

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GGAAATTAGG TTGGTTAATA ACATGTATAG ATGGAAGTGG GGTGAAAAAA AAAAGGAAAT GGGAAATGGAG TGGAAAGGGTT
GGGTGGGAGA GACACITCAC AGTATTCTTT TTGTTTTGAC TTTGGAAATG TTACTATTTC ATAACTTAA AAAAATGCAA
AAAAAAATA TCAAACTAG GTAGGAAGGA GAACAAAATG AAATATAACC AGAAAGGAAT AANCCTAACA CATTTTGAGT
GAATCACAAG GCCAAACCAA AAAAGAGCTA ATTAAAGTCA CTTTAAACT TGGTGTAA CTACCTACAC TCAGTCTAAA
AACGGNAAT AAGGGTAAAG AAATAGTGA ACTCTAGTTA GTTGGGTCTT TTCTTTACAG CAGTATGGG ATGGCAACCT
G

SEQ ID NO:357: (Length of Sequence = 275 Nucleotides)

CAGACAGTGG ATAATAACA CCTCATTAGG AAACCGATCT CAGAATGANC TCTGGAGTAT GAAAAGATC ATTTCTTTTT
GTNCTGTAA CCTAGCATTC CTCTAGGCT TCINCTCCTT TAATTGAACC ACAGCTTAGC TCATGTATTC TTTTATTAAC
ACCTGCTCT CATGTCCATA AGATTCAGGA ATTTAGGAAA TNAGGCTGGT TTGAAGAGGG TAGAAAGCAA TAAAGGCAGN
AAAAATAAG NCTAAATCA GGGGAAGATG TATTT

SEQ ID NO:358: (Length of Sequence = 314 Nucleotides)

GTGAAGGAAG TATGAAACT GAGACTAATA TTATGAAGTC TTTTTTAAT TCTTTATCTT ATTGCCCAT TTTAACCCTT
TGGTGTPTGA AATGGAAAT AAATATNCTC TTGCGATAG ATAATATGTC AATAACCAA AGGTGGCCTT AACCAATAAT
TGGCCCAACT TTAATATT ACCTAAAGA TATATAAAT ANCTAATCTA AAATTAATG CAATTTTGCT ATGACTTAA
GTGTCAATTA TCTGTATAA GNGATCCNT TTATGCAGTC ACTAGGCAT GAAGTTGGCA ATTCATCTAA ACTT

SEQ ID NO:359: (Length of Sequence = 372 Nucleotides)

CAAGAGAGAC ATAGCAGGCA TTGAAACAAT GGAAATGCC ACATAGCAGA AGGGAGTGAG GGGATCCAAA CTACAAGAGC
GACAAATCA ACTGTGGATC CAGAGACGAA AAAATGTCT GTAGTGCAA GGTAACTGG TGAGATGAAA AAAAAGAAC
CATTTTTAGA AAAANGGAAT ATTAGAATA TTGAAGTAAA TATCATAAGT CATCTATTA CAAAGGCATT AACTCCTTCC
TATCAATAGA ATGTACCAGT TTAANAATTT TTAGTAGGAA TATATCTTTT ATTTATTA CAGAAATCAN GGGACAAAGA
GGATTTGATC CATCCATACT TCTACTCTT ATGGGGTTG TCAAAATGTA GG

SEQ ID NO:360: (Length of Sequence = 395 Nucleotides)

GCATTCTTTT GATACCCACC TAATAAGAC AATCTCTAAA ACCAAATAAT AGGCTATGAA ATGTATTGTG AGTNCCTATT
TCATTCAAGA CAGAGCTTAC CTTAAGTCT CCAGCTGAGA CAGTTGGTTT TATCTTTCTG AAAGCAGTTT GGTCAAGTGT
TTCAAGTAAA TCAAAAGATC GGTTAATCAA TTCTTAGCG AATGGATTA GACACTCTCA TTCAAATGG CAGTTTTATG
CTTACTCATT GTCTGAATA ANCTAAATA CTTATGCTA TCTTCTGCT CCATTATTA TGTAACTACT GGGNCCTTAG
TATTCGTCTT TAGNCAATAT AAAATCACTT NCAGGTATTT TCCATCAOGG ACACAGAGGC AGGCACAAAT TAACC

SEQ ID NO:361: (Length of Sequence = 298 Nucleotides)

ATTTTTTGT GGGGAGAACA TTAAAGACCA TTCAATGTC ATGATGAAAG CTAATGGGAG AAGGCTTTIN TNCACAAA
ATTTCCTTA TTTTINCAAC TTTATTGAGG TTATAATTGA TATTAAGAAA CTGTACAGAT TTAATGTGTA CAGTCTAATG
AGTTGGGACA TATGCTTACA CCGNIGATGC TGTATACCACA GGCAAGGTAA TACACATATC CGTCACCTGC AAGAGTTTCT
GTGTTCCCN NIGTTTCTA TTTGNTTTT TTCAAAAT TACTTATAG GGTATAG

SEQ ID NO:362: (Length of Sequence = 437 Nucleotides)

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SEQ ID NO:350: (Length of Sequence = 384 Nucleotides)

GATCTGTGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTTGGTT TGANCCGTGA ACAAACTGT GTTTGTAGTT
TAGCTGACAT TAAAGAAAAA AGTTCATCAC GTGACTGTTA ATGTAAACCT GGTTATTAAA ATAAGTATTT AAAACAGGAG
AAATCTGGTA AGTTGTAGG NITCTAAATT CCTTTAGTC TGTTCACCTGA GATATTAAAT TTCAGTAGAC AGAACCCAAA
AAGAGATTTC ATTTCTTTCT AATCACTTTG GCTTCINTCT NTTTTNTTAA GTAGGTAAAA ACCTTCCTTG GTGGGCACCT
AAGCAGGATG CAGCCAATTA GTTCATGAAC CCAGCTGCGG ACGTGAAGGC TTAAATCTA AGGA

SEQ ID NO:351: (Length of Sequence = 305 Nucleotides)

ATCCTGACCC TCCCCTGTC AAGCCAGGG AGCCCCAGCC CAAGATGGCC AGCCTGAAAC TGTGGCCAG GGCTCCTCTT
GTGGCCATGT ACCCAGGGCT GGCTGGCCTG CCATTTGCCT CTCCCAGGAG ACAGCCGTTT TTCTGCAACC ACACCCCGTG
CCTAGCCACA ACCCCAGGCT GCAGCTGCTC AGAAGCTCCA GGCATTTTGT TTCTGGTGAC CGCCCCAAT GGGATATCGG
TGATCACTGG TCCACCTTC CTGTCAGGGC TTTTCTGGGG GCTGCTCTTG GAAATGAAGT CTAA

SEQ ID NO:352: (Length of Sequence = 270 Nucleotides)

GAAATTACCC ATGGTCATAT CTAGCCTACA AAGAAGAGAA AATACAGTGA TTCAAGTTTC ATTGTATTCC TCTCATTGAT
ATATTTATCA ACCTTCCAAT TGAAGGAAGT GTCTTCTAGG CCTTTACAAA GAATGTAACC AGGGTTTAGG TATACAAGTT
GCATATGATA AATCTGTCAT GTTCTATAT AAATCTGTCC ATATTCCTCT TCTGAAATGC ATTATTTTTG GGGGAAATTA
AAATGTGATG CAAAGATCCT TATACTTTGT

SEQ ID NO:353: (Length of Sequence = 195 Nucleotides)

GTGTGATTCC ATTATATGA AATGNCAGA ACAGGGAAAA CCTATTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT
GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TNATTGCTTC ACGGGGTGAT GACAGAATGT NCCAGAACGT GACAGAGGTG
GTGCCTACAC AACTTTNTGG NTGTAATAA TGCCG

SEQ ID NO:354: (Length of Sequence = 388 Nucleotides)

GCCAAATTTT TTATTTTGT AGAGATGGAG TCTCCCAATG TTGCCCAGGC TGGTCTTAAA CTCCTAGGCT CAAGGGATCC
TCCCAGCTGG GCTCCCAA AAA GTGCTGGGAT GATAGGCATG AACCACCAAT CCCAGCCCAT TTCTTTTTC CCTTTGCACA
GTACCAGATA TATGGTGGT ACTGCAGAAA TAATTTCCCC CTGCCCTCTA CATTGATCAT TTGATGACCA AATAGTGTCC
GTCTAGCCAC TTATTTATGA TTTGTACAAA ACATTCCGCT TTCTGAGGTA GACAGTGATA TTCTGAAGCC ATCAGTAAGA
GTAATTTTTC AGTNTTGTG AAAGTGGNCA TTCTTTGTGT AAAGGTCAGC CTGTCAAGGA AATAGCAT

SEQ ID NO:355: (Length of Sequence = 288 Nucleotides)

TAAAGTGAAG TATTGGGAAA GGAACATCT CACTCTGATA GATTTGAATT TNCTATTTCT GCTCTGTGAC AAAACCTGA
GTTGATATGT GATCAGACAT TTACAAGGCC CTGCATTTCTA CCTGGNAATG GCTATAGTGG TGTGTAGCTG CTGTGAGATG
ATTTACTGCA ATTTGTCACT TTTTGAAACT GTTCCAAAT AGTCTGCTGA CAGCCCTTCC CCTCATGAAA ACATCTCTCC
TTTTCCAGTT AAAAAACAG TCAAAAACA CAAAAAAG CCACCTCC

SEQ ID NO:356: (Length of Sequence = 401 Nucleotides)

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TGCTCCAGGA AATTGGAGTT CNAGCTGAAG GCCTTGCGNC ACTCOGNGCA CTCTAGGGC TTCTNGCCCG TMTGGTGGC
 TOGGTGCTGC ACCAGCGTGG TGCTTCGNCC GAAGACTTGC CGCAGTCCGG GCAGCGGAAG GGCTTCAGGC CGCTGTGTGT
 CTCCTGGTGG TGGATGAGCT GCGAGTNGC GCGGAAGGCC TTNCCGCACT NCCTGCAAGC GTAGGGCTT

SEQ ID NO:344: (Length of Sequence = 227 Nucleotides)

TCCGAGATC ANATTACCC TTGCCAGAGG TCAGGSCCCC CGGCCTTGGC GGCGGGCCAG AAGCGTGAAT TGGCCTSCGT
 GAATGCATGC CCTTAAACAT CTCTAGACTA GGGGCAGTGT CCGCCAACCA TGGAGGCCCT CCATCAACAT CCTGACAGCA
 TCACCACNT CCAACCCCCA TGTCACCC TGGNGNTTCC ATACCTGTAG TAAGAGAGCA AACCATT

SEQ ID NO:345: (Length of Sequence = 249 Nucleotides)

GGGCAATGTT GTCACAGATG TGTGCAGATT TTSCAGAGGA CATAAGTTGG CTGTGAGGWA GAACACAGAG GTTSCCTATT
 TTTTAGGCAG GAAAGAAAGC CTGCACTTTT CTGTGTGTGT GTNTCAATAA ATCTGAATAA CACCTTGAAA GGGTTAAAAA
 GCTGAGCACC AGGTGTTTTT TTCCACTTT CCAGAGTAAT TTAAGCACAC NSCAAAGTTA TCTCCCTTCC TCCCCACGA
 GCCAGCTTA

SEQ ID NO:346: (Length of Sequence = 356 Nucleotides)

ACCTAGTCCC GCAGCGCTG CAGCGCTGG GTTGGGGAA GAGCTGGACG CCGAGCTAGA GGAAGAGGCA GAGCTGGACA
 CAGTGGCGGC GTGAATTGGC CACINCTTTC GGAGCCOGAN CTCTCCCGCA CTGGAGAGGA CTCTTCTTGG GCTGGGCGGC
 TCTTGGTTCC GCTCCCGCTC TGCTGCTGCT GCGGCGATTT NGCGCGCGCG TTCTTGAACC AGACCTGCAG TGGGCGGGAT
 GGGGAGAGT GGGTCAAAGG GAGCTAGGGG AGCTTNTTGC TCCACCGNCC CGTGGACCCA ACTCCCGGTC CAGAATATCG
 CAATCCTTTC TCACCGAGGC CTTGACCCCT TCTGT

SEQ ID NO:347: (Length of Sequence = 155 Nucleotides)

GCGCGGTGC GTCCGATGCC CAGCTCGGT CCAGACCGCG GGGATGCAGA CCGGTTTACG TCAGGCTTGA GGGCTGCTCC
 GCATAGACCA ACGTCCGGG AAGGCACACA GTGGCCGAGG GCGCGCGCGC TTKGGCTACG GCTGTATATG TATCT

SEQ ID NO:348: (Length of Sequence = 362 Nucleotides)

AATTCOGATT TAACTGATTG TCTCATCTG CTCATACATT TCAAGTTTAA ATGCAAGCAT AAAATGTTTA TCAACAAATC
 TAGAGAGCAC TTGGATTTIN AATTTTCTG TGATCACAGT AAGGAGCATA AAAAAGAGTA TCINCTGTTA CACAAGGCCT
 GINCTCTCTT TACATCTTCA GACTTAAATT CTGTAGAAGG TAACAGCTTT GTATTAGGA CAGAAGCTTA GTGGTCACAA
 ACAAAAATA ACACTGAAAT ACAATTCGGG NATTANTGAT ACTGTGTGTC TCAAAGGATA CCTGAACTAT TACANINACT
 AATAATTTGG GCAATGAGAT TCCNGGTGN TTCAACTTTT TG

SEQ ID NO:349: (Length of Sequence = 342 Nucleotides)

AATTCCTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTCAAGTAT CACAATGTTT ATTGATAGAT ACAAGTATAT
 AAAATCAGGG CATGANCATG ACTTGATAAA TTAAGTAGAC TTAATTTCAA TACTATAATA GNGGGACCA ATTCAAATTC
 TCACCATTTG TTTCACCCC ACAAAAACCA CTTCAGGGC ATTAACGNTC TCTCAAACT GNTCAGTTTT GTGCAAGTAA
 ACCATGTTTC TTTTAAAAG ACTTGTCAC TTGCCAGGC TCAAGGTTAT TAAAATCTAG GCACATAAAG NCCATTACTA
 GAGGTAGGAA ATACAGGCAA TT

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SEQ ID NO:337: (Length of Sequence = 279 Nucleotides)

CTTAGGGCT CCTCTGACT CCTTCCAAC CCAGGTCTG CAGCCAGGT AAAGCCAGAG CAGACTNAAG GCAAGTTTTT
 AGGAAACCAG GNGGCTTGAT CCAGACTCAC AATCTCCCTG CAAAAGTKTT CAGAACACAC CGCACAAACA CACACAGNC
 TCACAAACT TCTGAATGTC GCTCTGTCTC CACCTTCTCC AGTCACCGAA AGACCTCGGC CTGAATTGGA GCCCGCAGCC
 GTAGCTGTCC CINTCCACCT GINGCCCTCG CGGAGGCTT

SEQ ID NO:338: (Length of Sequence = 339 Nucleotides)

CCACNCGTGG AGGGAGGCCA AGGGGCAGCA AGAGAGAGGG AGGAAGCCCC ACTCTTTTAA AACACCAGA TCTCTGTTRA
 ACTGAGAACT CCTTATCAC CAAGGGGACG GTGCTAGACC ATTCATGAGG GWTCCGCTC CATGGGCCAA TCCCTCCCA
 CCAGGCCAC CTCCAACCT GGAAATAACC TCCCAGCAGG CCCGCTCCA GCACTGGAAA TAATGCTTCA GGTGAGACT
 GGAAGGGGAC TGATGGAGCC TGGWTGTTK TCCCGCCCA GSTCTMACG TGAACCGTAA TCCCAATGC TGGAGGGGG
 GCTGGTGGG AGGTGACTG

SEQ ID NO:339: (Length of Sequence = 334 Nucleotides)

GGCACGGGC TGTCCTNGT CCAGCTAGCC TCACAGGGAG TGGCTCTAA AACNGCCCG CCCACNCCAT TTGGAAGCTG
 TCCCGGTTT TCCGTGAAGT CCTCCCGGC TGTTGTCTCC TGGATGGTCT GGACCAACAG CTTGGGGATG AGGGGAGGCT
 CGGGGGCAAG GGCAGGAGCC CCAGCCAGGC GCTGGGGTIN TGGCTGATCG AAGAGCTGCA CCACCCNGTA GCTGGCCAGG
 TGAGTATNGG CGTCCACCAG GTGCAGACAC ACATTCTTTT CCTTNACAGC CTCCTTACCC TGGAGTTTAT AGCCAAACGT
 GAGTGCATC CAAT

SEQ ID NO:340: (Length of Sequence = 450 Nucleotides)

GGCCCCACAA TCCCTTCTG GCTCCGGGA CGGGCGGGG GGGCGAGCG GCGGAAATA ATTTNIGTT TGGTGTCTC
 TGCCCCAGTC CCTTGGCCG GGGACGGGA GACGGGAGAA GGTGCGGAA GCGGAAGCA GGAGCGGGAG CGCGGGCCC
 TGGCAGCAT AGGGCGGCG AGAGGGCAG AGCAGGATT GAGCACCTAC TGTTNGCCTT CACGCTTTAC AAAAGGATTT
 TCGTTCGATG TTCACTACAG CCCCTGCCG GGGGTACTGA TGCCCCATTT ACAGAGGGAC AAGCCGATT TCGGAGAGGT
 GAAGTCACTC GCCGAAATC GCACCGCCAG GGTCTGCGTG ACACCTAAA GCAGTGTCA GTTACCCCGG GGAGAGCGCG
 ATGAACCTGA ACCACTTGT GGTCTGGTTC CTGCTCTGC TGTTTTTTT

SEQ ID NO:341: (Length of Sequence = 192 Nucleotides)

TTCAAACCT GCGGCACGG CTGTCCCTC GAGGCCCGC CCTTCCCTT TCCGGAGAGC CCACGCTGG GTCTTAAAGC
 CCACGCTGG GTCTTAAAG CCGCCGGTN TTTACCCAGG ACGGGCTGG GGAAACNGG TCTTTCTAG CTCTTGNTT
 ACTTCTGGA GACTTCTTAA AACGAGAGGA GA

SEQ ID NO:342: (Length of Sequence = 229 Nucleotides)

GTGGTAACTT TTTTAAAAA CATAAATACC ATACAATCA TCCTTTTAA GTGTGTAATT CAGTGGTTTT TGGTATATTC
 AGTGTGCAC AGTCATCACC ACTAATCCA GAATATTTT ATCACNCCA CGGCTGTATC TCCATTTCT CTCTCCCKG
 CAGATCCTGG CAACGCTGA TCTACTTCT GTCTCTTACA GACTTATCTG TTCTGGACAT TTCACATAA

SEQ ID NO:343: (Length of Sequence = 229 Nucleotides)

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TAAGGATTTT AAGGAGAGTC AAATCTACA TTCATCCAGG CAAACATCTA CTCCTCCATT GATTAAATGNN TCCACTCATC
CGTSCAACAC ATTCACTCTT TCATCCATCC ATTCATCCAT CTATCCINCA TCAATCCATC CATGTATCTT TCATTATCC
A

SEQ ID NO:331: (Length of Sequence = 322 Nucleotides)

CCCCAGTTG CCCCOCCTTT GTCTCCAGCG GACTGGAAAG AACCCACCAT TGTGAAGCAC AGAAAATTGC CGCACTCTT
ATTGGCTAGG TTCCCGACT TCCGCTCTCG GTTGGTGGTT GGCTTTGCCT GTTACCTGIG TTGCCACTA CCACTGCTC
CGCGAGCCC CAAGGATGGA TCGCTATCCC GTAGCOGGGT GTTCGGAGC GCTGCGGGCA AAGCAGACCG CCTTGGCCT
ATTATGGGT GAGTGGCTCT GTACTCTAGA TOGGCTCTGT CACTTACTAA TGGGCGGTGT TGCCCTCGCG ACTGCAGGTT
TT

SEQ ID NO:332: (Length of Sequence = 441 Nucleotides)

GGCTCAAGNA ACCTGCACTC TTGCACTCTG GCCTTCTCCC AGGCTGAGCT TTATCATATC ATCAGCAGCA ACCTGGAGAA
AATGTCAAC CCAAAGGGTG AAGAAAAGCC ATCTATGTAC TGAACCGGG ACTAGAAGGA AAATAAATGA TCTATATGTT
GTGTGGATTC CCTTCTGGCG TGTGTCTTC ATTCAAAAG CATTTATTGA GTGGCACCTA TGTCCAGCCT GAAGATGAAT
GTGTGGGAA GGGGTGGTG TCACAAAGAC AAAGATGACT TAGATGCCCA CTGTAATCTT GACTGTGAGA AAGAGGGGAT
TCAGGCCCTT TCTATCCAG TAGTCAATGT GCCATCTCCC CTTCCTAGT CACCTCTTAT CTTCACCTAC CTCTTCTT
CTCTGCTTA TCTGTTTCC ATCTAAGGCA AAAAGGGGG G

SEQ ID NO:333: (Length of Sequence = 354 Nucleotides)

AGAAGGTTAG ACCGAGTAGC TTGAGCGCCT CTTCGGTTA CCTTTTCCA GCGCCAGAGG GCCTTAGGGT TGGGGTCTC
GCTCAGGCAC AGAGNCCGA CACGAGCGG CGGCTTCCC GGGATCGAGG GACGCGCAG CCAGAGGAGA CGAAAGGAAC
CGGGTCCGA CCAGATCGGA ACCACTGACC ATTGCCCATG GCGGCCCTAG TGAGTNTGGA TTTNGCGGGG TTCGGGGTT
CCGACGGCA CCTCGGCGAC CCTTACTCA CCGCTTCCC TTTNCCAGG GNCCTAGNAG CCAGAATGTC ACTGAATACG
TNGTTCAGT TCCTAAGTAA GTCCCCAGGC CCAT

SEQ ID NO:334: (Length of Sequence = 196 Nucleotides)

CTCCGCTCC GCACCGCCT TTCCGAGCA GGCTACACCT CTCCCTGGCG CATCTTTACT GGAAAGCCGG CAGNGNGNG
GGAGAAGTGA GCNCCGTCTC CGCGCTCCT CGGTCTGCT GGCTGAGCG GGGGATGGCT CCGGAGGGAG ACACTCAGGA
AACCACCTCC GCCCTTCCC CATCTTATC CAGCGG

SEQ ID NO:335: (Length of Sequence = 261 Nucleotides)

TCGAGAGCT GTCTGGGGCC AAGTGCTGG CTGAGTACTA CTGGCTCANA CGCCGCTGC TGGGGGCCCC TGGNAATNTA
AGTCTGCCC CGGCTGTGTC CGCCCTCTC CCTGANAGCC CCTGCTTCC TGGGCACAGG GAAGCTCCA TAGGCTAGTA
GCATCAGT GCCAGGCCCA GAGCTTACTG GACTTCCCAA GTTCTATGG GACTAGGGCT GAGGGTACAC ATCTGCTTT
TTTCCAGAAT ATAAGTTTTG G

SEQ ID NO:336: (Length of Sequence = 191 Nucleotides)

CGGAAAAGCG CTTCGGCCAC ATCCAGCAGC AGTAGCAGCC GCAAGGNCG GGACTCGAAG GCCCACCNA GNCGGACTAA
GTCTCCAAG GAGCCGCTT CGGCTACAA GGAACGNC AAGGCTACC GGGAGGACAA GACCGAGCCT AAGGCTACA
GGCGGGGCG GTCCNTCAGC CCACTGGGAG G

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GCACCACCAC GACTGGCTAA TTTTAAATTT TTTNNTAGAG ACGGGGGTTT CCTATGTTG CCCAGGCTGG CTTGAATTCC
TGGGCTTCAA GTGATCCT

SEQ ID NO:325: (Length of Sequence = 461 Nucleotides)

ACTCCAGACT CCTCCAGCTG TCATGGATCC TGGGCCAGGG GATCCCGNAC TCACCCAAAG TGGGGCTTTG GGCGGTGGTG
GGCCGGTTCA GTGGTGGAGC GTCTTTTGT CCAGCTCAGA ACCTGCTGCC GGTCCGGTCC CAGAAAAGTT TCTAGCGGGT
GTAGTTGCCA AAATTAGGGT CTGTNACTGC TGGGCTGGCG GTGGCGCCT CATCCAGCC TTGGAATCC TTGCCTAGTA
GCGGAAGTT CTAAACAGCA AAGGATACAA GGCCCTTGA GCGCAAGTAA ATTTCCCTC TTGCAGCAAC AGGTGTCTC
CAAACCAAGC AGCGTCCAGC TGTGTCGGT GGTGGAGTT CTGCAGTGG GTGTGGGGAT TGGGAAGGTG CACAGGCAGC
CGCTTGAGAC CCAGAGGCAG TTTGGGGGAG AGGCCTTGGG CTCAGAGGCC TTTCTTTGTT T

SEQ ID NO:326: (Length of Sequence = 391 Nucleotides)

GGCCCTCCAG TGTCTGCAG AGAGGCACTC TTGCCAAGTG TCATGTATGA CGCAGCTGAA AACCAGAAAC ATTTCACTTT
CCAGCCACGA GACTGCAGCA ATCTGCTCTT TGGACTGCAC TTAGGGAAAC CGAGGCCAG ATAAGTACC CCTCAAAGC
CCCCAGGACG GCAAAATCAA AGGGGCTGAG GTGCTCTGAA CAGCCCCAGC AAATTAAACC ACCTAAGTTT GCGCTACTCC
CACTGCCCCG AAGCAGCCTG TGGTGGGAGG TGGGGGTGGA TACAGTGTTA CAAAGAGAAA CCTGAGTTGT AGCCATAGAT
TGCTAATCAG TAACAAAATA TCCCTCTAAA CCCAGTCTG CCTTGAACCC ACAGGCTCAG GATGGTAAAT A

SEQ ID NO:327: (Length of Sequence = 438 Nucleotides)

TACTGACTGA CCTGGT GATCCAGC CGAGACGTT CTGCTCCATT CCGCAGGAG CTACCTTCCC GAGCCGCGCT
TTGCTACCT GTAGGAG TAGAGGGAAA TAAGACAGCC CTCTTAGGA TGGTGGAGTG GCTAGAAAGA AGCAATCCAC
GCCAAAGGCT TAGCTCAGT CCTAGACTTA GTAAATGCTC AATAAATGTC TGCCATTGTT ATTATTAATT ATNATGCTTC
CAGCTGGCCT GGAAGGAGGG TTCTGGAGCC AGAAGGGACC TTGGAGAGAC CTCGGTTAAA TCTCTAGCGC CATCTTTATT
TTTAGGATGG AGTAACTTGC TCAGGACCTA CATCTAACAT TGTGGAGGGG ATGCGGTTTT TAAGTAGGAA TTCTTNGACT
AGACCTCTCA GCAACCCCTT CTTNCCGTC AAGTGGG

SEQ ID NO:328: (Length of Sequence = 400 Nucleotides)

TTGCCCTCTC GGCCTAGAAG TCTCCATTA TGGTCTGTG TCTGCTGGA CCCACGGGC GCTGCACAGG GAACCATGTG
GCGTGAACC TCAAGTCCNG NCCAGCAGGG GTCAATTGTC TCAGNCCACC CCTCCCTACC CCCAGTATCC TCTCTCCTTT
ATAGATCATC CATTAAAGTGC CAGACACTGC AGAAGGCACA TTGACTAATA TTAAATATTA GCCCAGCTAC CCTGCTGGGC
TGTCTTCTT AGAAATGAGG AAGTGGAGGG TTAAGTGGAT TTCTCAAGGT CGTGCAGCTG GTAAATGGCA GAACCAAGAT
TTGAATCAG GTGTGCATGA CTTCAAAGGA AGACACCACT GAGGCCTCT CTANTGGGTC TGCNTCCCTA CCGGCCCTGG

SEQ ID NO:329: (Length of Sequence = 227 Nucleotides)

GGCTGGGCTA AACTCCAGAC GCTGGCCACC TTCATAGGGT GGAGATGACA GAACAGGACA GGAGCCATGG GGCTCCCGGG
GCGGGTAGGG GTGGGTGATG TTCCTTGGCT TGGGGGCAGT TACAAGGTA CAGTGGGGCT TGTGAAGGG CAAAAGTTCT
GTAAGTNGT CCCNACAGGC CAAAGAAACC CCAGAGCCGT CTTTCGACTG ACTACAGCCT GGAAGAG

SEQ ID NO:330: (Length of Sequence = 401 Nucleotides)

TGAAAATATA TCCACTGTTC AGAGGGACAA CAAAGGCAGT TAGACTGTCC TGAACGGTCC TGCCCTAGGC TGAAATTTTT
GTAGCACTTG ATCAGTGTCA AAGTATCTT CCTTTAATA TCTATTTTA TCATTGGGTA TCTGAAGAGG AAGTGAATT
GGGGTAAGAA TTTAGGTTCT TGCCATAGCA TTTGGGTGGC CAGGGTAAGC CTCAGGGTGG AGGACCCCTA AAGAAAAC

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CAGTGGCCAT GCCCTGGCG ACCTCAGTGT CCCACTCTGT AAGGGGACAA TGCAAATCCC TTGCGCTCAT AGGGTGCATG
 TGCCAGINTT GATAAAGTGC TGGCCACAGG CCTGCGCTTC CCAGGGCTCA CAACACTGTG TCCCTGACAC ACCCGTGGGC
 TGTAGTGAAT CINTTCATGG GGTATTGACT ATAACCGCA GTCAGGAATG AATTTCACAN CATAGCTCAG TACATACACA
 CATATCT

SEQ ID NO:319: (Length of Sequence = 382 Nucleotides)

CACTGCACAC CTGCGGTGG GGACAGGACA TGAATAAGCA CAGAGCTTTC TTCTTTTGGAG GCCAAGCATG TGGTGCAGAG
 CGGGACCAAC TGCAATCCACA CAGCCCGGCG CACTGCTCC TACTTCTGCT TAGCGTGTGA GCAGCTTGGT GACCAGGGTC
 TCCACCAGGG GGCAGGCCAG GACCGGCTTA CAGCACTTTC TAGGGGTCT CTGGTCCCGG GCTGGGACAC ATACAGGGCT
 TAGTAAAGTT CATAGATGGT AGCTAGGCAG CCGCAGGCC CAGGTGACAC CINTCCCTG CCTGNCCTGT ACTGNCCTGC
 TGCAGCACTC CTGGGAATCT TGTACGAAGA CAAGGAGAGA CAGGACTTCA TCTTCACCAT CT

SEQ ID NO:320: (Length of Sequence = 368 Nucleotides)

CATCGGGGC ATGGACAGCC CCGGGGTGN CGCCCGCNC CCCCCTGCC GGTGCGGTG CNGTTCACCA GGCAGCACCT
 GGACAGCTCC AGAGTGGGG AAGCGCCATG GTTCTGCGC AGAAAGGATG CGGGTGGGG CCGGAGATC CTGCCAGGAC
 TAGGGGCTT CCTTTCCTAT CAGGAGCTG CAGAGAAAC AAGAAAACAT TAGAGGGCT TCTGTGTAGG GGGAGGGCAA
 GTTGAAGTCTA TCTTCTCTT TGTAGTACT AATTAAACAC CTGCTGINTG CCGGTACTIN TGCAGGGTGG GACAGGCATC
 ATAGCAACTC ACAGTGGTCC CCTTCTCTT GTGCCCATAG TCTAGTAG

SEQ ID NO:321: (Length of Sequence = 355 Nucleotides)

GGTGGACTGT GCTGTGAAC TGAGCTGAAC TGGATCAGG AGAAGGAGAA GTGGGATG AGCCCTCAC CTCCACACAC
 TCCTCTCTGT GCGTAAAT CTCCATTAA GCAGCATGC TGTCCCTGT AAACACCCAC ATTAAGCCAT TATTCATCTT
 ATGGCTTAG TAGGCGTTAG TCCCTCAGAT CCTTCTGTC TGAAAGCGGA TCCTGATAGA GAGAAGGGAA GAGAGATGGA
 TGGTCTGGG GACGGCAGGC TGGTCCAAGA GTGGGGAGGA AAGATGTCTC TGGACTCTN GGGNAAGAAA TATTTCTGG
 GGAATATGG AGGCACCANA GGCAAGCTCA AGAGG

SEQ ID NO:322: (Length of Sequence = 225 Nucleotides)

CTCTCACTTC TCACCAGGCA CCCACAAAGC CCGCAGGAG CTCCATCTTT CCAATCCANT CCCATTATOC CAATCTCTAC
 CCCAGGATCC CCCAACTCC TCCCACTTCA CCTCTGCCAC AGACCCGCTC GCCCCCAAAC TTCAGCCTNC CCTCATCTGC
 CCTNACCACC CACAGCCCTT CCTACCTAGC CCTCTCCGC GACGGGCCCG CGGGCTCCCC ACATT

SEQ ID NO:323: (Length of Sequence = 250 Nucleotides)

CTCTCGCTCC TGTCCGTGAC CTTCAGATG CAGGTGACAG CCTGCCCTTC CGTTTCTNTC TTTCAGTCC CGCTGCGCG
 ATTGGGTTC AGCCCTGCC ACACGCCCG TACATCCGC CTACACTCAC CGATGTGCC TAGCAACCG GCTGCGCGCC
 AGCATCCGA ACGAGGTCC CCGGCTCCA GTTCTCTGN GGGAGGGAG AGGGGTGTG CTTCTCCAGC CCGCTGCAGC
 CTGGTGTCTT

SEQ ID NO:324: (Length of Sequence = 338 Nucleotides)

GINTTCTAT GCGGATAAAA TTCTNAGGT AAGAAAAGTT AGCTCTGAGC AGCCCTCCGC CTGATACTAA TACTTTACCA
 ATGGAGATTT TCCTTTCTT TTCTGTTTT GAGACAGGGT CTCACCTTGT TTCCAGGCT GGAGTGCAGT GGTGCCATCA
 TGGATCACTG CAGCCTCCAT TTCCCTGGCT CAAGCCATCC TCCCACTCA GCTCCCGAG TAGCTGGGAC TACAAGGTGT

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TGCAATTGGA TACGGAGAAG GTCACAACAG GCACTGGTTT CCAGGAAGCG CCATTACCG TTTTIMATGG GYCAAAGGGA
GTTACATTGG CTATGGCTTT TGAAG

SEQ ID NO:311: (Length of Sequence = 489 Nucleotides)

TGACTCGGT CCTGGATGTG GTGAGGAAGG AGTCAGAGAG CTGTGACTGT TTCCAGGGCT TCCAGCTGAC CCACTCTCTG
GGGGGCGGCA CGGGGTCCGG GATGGGCACC CTGCTCATCA GCAAGATCCG GGAAGAGTAC CCAGACCGCA TCATGAACAC
CTTCAGCGTC ATGCCCTCAC CCAAGGTGTC AGACACGGTR GTGGAGCCCT ACAACGCCAC CTTMTCGGTC CACCAGCTGG
TGAAAAACAC AGATGAAACC TACTGCATTG ACAACGAGGC CCGTATGAC ATCTGCTTCC GCACCCTGAA GCTGACCACC
CCCACCTACG GGGACCTCAA CCACCTGGTG TCGGCCACCA TGAGCGGGGT AACACCTGCT TGGCGCTTCC GGGCCAGCTG
AACGAGACCT GGCAAAGTGG CGGTGACAT GGTGCCCTTC CTGGCTGAAT TTTAATGCC CGGTTTGGGC CTTACCAGCC
GGGAAGCA

SEQ ID NO:313: (Length of Sequence = 302 Nucleotides)

CTTCTCATGC CAGTCTAATG ATTGTTTTTA GAAAAGGATA TACATTGACC TTCAATGTAA TAAGAAATGC AACACTTTAC
GGTGTCCAAC TGCTAAGATT TATTCCAAC TTGTGAGACA CAACTATTTT GCCCAATCCA AATCAAAGGG AATCAAGGCT
GTGAAATCCA CACAGGACAT CAACGCACAC ATAAATGAAA ACTACAGATG TGTGAGAGGC AACCATATAC ACACAAATAA
TGTAACACT AAATTCCATG AAGTAGCTGT CCAGGGAATA CTTTCCAAT AACCTTCAGC AG

SEQ ID NO:315: (Length of Sequence = 339 Nucleotides)

CGCGTTATTT AAATTGTGAA AAATAATGAA TATTAATTTG GAGCATAATA TTTAAATACA TGAAAAAGC TGGCTGGGAA
ATGTTGGCAT GACTTTTCCC AGATGTTAGC ACTGCTTCAA CTTTGTAGAG NGCACTCTGA GTGTAAGTTT ACTAGACTGA
CATTACTAAA ATCATTGGTG CTATAGAGGC AGGAGAATAC GGGGAATAAG AAAGCCAGTT GCAAGCCAAC AATCCTAAAA
CTCCTCCTTT TGCCATGGAC TGACGGCATA TTAAATGAGA TCATGCATTT TAAGNATTA ACAGTGATCA CCACATGTGC
GTGTTCCAAT AAAAGGAAG

SEQ ID NO:316: (Length of Sequence = 430 Nucleotides)

TAAGTGGTG GTGCTGTCTT GGATGCTTCC AGTGGGCCCC GACCAGGTCT GGACAATGCC TGGGCGCGGT CCCCCGCCCC
TCCTCTACAC ACACGCAAGA NTTCCGAGCT CCATGGGGAA CAGAAGCAAG ATATCCGTAA AATCAAAGTC TAGGGGGTGG
GAATGAAAAG GGAAGTGA GGAACGGGGA GCCAAACCCA GGAAGACGCC TCTTTTCTTG CACATTCCTT CTCCTTTATA
TACTCAGCTC TTGGCTGTCT CCAGTATGTA CCCACCTGG TCTTCCAAGC TGGGAGCCAC TTTTATAAC ACAATCACAG
TTTACAAAC CCCAGGAAG TTCCATGTGG NGAGAGGTTA AGTTTCGNCC TTGTCCGGG AATTATGACA CTCAGAATAT
CCCCTTGGT GTAAATGGAA GACAACCTTT

SEQ ID NO:317: (Length of Sequence = 317 Nucleotides)

GTTAATGCTT CTNATACCTA ACAAATCCTG GAGGGCAGNC AGCAACCAACA CTCAGGGTGC TGGGAAAAGG TGGTGAGAG
ATCTGAGGCA TCTCGGGGCG AGGGGAGGGC TGGGAAGGCA GGCTGGCTNG GACCTTCGCA TCTTAACCTA ACCTTGACCC
TCTTTCCATG AGCAGAGTTC CGATGCCCTG GAAGCCTGG AGAGTGGGA GAGATCCCG AAAAGGAGAG CAGTGCTCAC
CCAAAAACAG AAGAGTGAGG CTTCCAGGGT GCAGCAGGGG TGGGAGGTGA TCAAGCAGCG TGGGGATTGT AAGCCCG

SEQ ID NO:318: (Length of Sequence = 407 Nucleotides)

CTGCCCCGC ACCTTCCCCC CCTATGCCCC TGCTGAGAT AGGCCCTTCC CTCCTCCGGG AGCCTCCCGG GCCACGGAC
CCTCAACTTC TCCAGCCGCT CCACCCACGC TTCTGGACC GCCTCTGCA GCGAGGCTC ACATCCAGCA CTGTCCCTTA

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CCTAAATATA TATGCACCCA ATACAGGAGC AACTAGATTG ATAAAGCAAG TCCTGGAGGT GCCTACAGAG GAGGCTTAGG
CTCCACACA TTA

SEQ ID NO:304: (Length of Sequence = 416 Nucleotides)

TTTTTTTGTAG ATGGAGTACT CGCTCTCTTG CCCGGGCTGG AGTGCAGTGG CGCGATCTGG GCTCACCTGC AACCCCTGCCC
TCCCCAGTTC AAGAGGTTCCT CTTGCCCTCAG CTTCCCGGGT GGCTGGAATT GCAGGCACAC ACCACCATGC CCAGCTGCTT
TCTGTATTTT TTAGTGGAGA CGTGGTTTCA CCATGTTGGC CAGGCTGGTC TTGAGCTCCT GACCTTAAGT GATCCGCCAG
CCTTGGCCTC CCAAAGTCT GGGATTACAG GCGTGGACAC CGTGGCCAGG CTGTTTTTTA ACTGACTTTG GATTTTACTC
CCTTCTATG CAAATTTATT TTAGAATCTG TTCTTTAACC TTAGGGGGTT GGGTTAGACA AGTTTCAAGG GAGCCTCAAG
TGKAAATGCT TTAAGG

SEQ ID NO:305: (Length of Sequence = 223 Nucleotides)

CACACCCAGC TAATTTTTGT ATTTTATAGTA GAGACGGGT TTCACCATGT TGGCTTGGCT GGTACCGAAC TCCTGGCCTT
GAGTGATCCC CTTGCCCTCAG CTTCCCAAAG TGCTGGGATT ACAGGTGTA GTCAGCGTGC CCAGCCAGA TTTTATGTT
TTAATTACAA ATTTTACGTT AACTGATTCT GCACATTAT ATTTGCACAC TTGTGCTAGT GAG

SEQ ID NO:306: (Length of Sequence = 169 Nucleotides)

GTTTTGCCAC ATTGGCCAGG CTGGTCTGA ACTCCGACC VGTGAGCCA CTTGCCCTGG CCTCTCAAAG TGCTGGGATT
ACAGGCGTGA GCACACGCC CGACCCATAG CTCTTTACAA CTGCCTTGTA AAGAAAGCAT CATTGGGCAC TGTAGTATT
TCTCTGAA

SEQ ID NO:307: (Length of Sequence = 303 Nucleotides)

GATTGGTAC AGAGTATGTC AGGAAGACAA CTCAGATGTC CATTTTAAAT AAAGTGTAC ATGAACAATA ATTGGAATCA
TCAGGTAAAT TTTTAAACA AAGGTCTTC ATTTACTGTT ATGATTGGAA AAAAAATAG AAAATAAAGT AAGTSCATA
GGCTAATTAA AAAATAAAC CTTGGCCGGG CGCGTGGCT TACGCTATA ATCCAGCAC TTTGGGAGGC CGAGACGGC
AGATCAGNG GTCAGGAGAT TGAGACCATC CTGGCTAACA CGTGAAACC CCATCTGTAC TTG

SEQ ID NO:308: (Length of Sequence = 143 Nucleotides)

ATCTAGGAGG CTGAGGTGGG ATGCCCCAG TACTGGAGGT CAGGGCTGCA GTCAGCCATG ATCATGCCAC TACACTCCAK
CCTGGGTGAC AGAGTGAGAC CCTCTSTCAA AAAACCTCAG TCAATVCAA CATACAGTAT ATT

SEQ ID NO:309: (Length of Sequence = 199 Nucleotides)

CCCACCTCA TAANCCCCAC TGGGGAGTCT GGGGGCTCT ATGCCATGT GCCTGGAATN ATNATATGCT CATCATTTA
TGAAGAATAA AATTTGINTT TCCTGCCITA AAGTTACATT CGTCTTCCG CTCAAATCCT GATCTGGTCC ATTAAAGAGT
GTTGCGAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCC

SEQ ID NO:310: (Length of Sequence = 426 Nucleotides)

TCCCTGTACC ACCTCTTCTT GAATACGGAG GAAAAGTTCG TTATGGACTG ATCCCTGAGG AATCTTCCA GTTCTTTAT
CCTAAACTG GTGTAAACAG ACCCTATGTA CTGGAACTG GGCTTATCTT GTACGCTTTA TOCAAAGAAA TATATGTGAT
TAGCGCAGAG ACCTTCACTG CCCTATCAGT ACTAGGTGTA ATGGTCTATG GAATTAAAAA ATATGGTCCC TTTGTTGCAG
ACTTTGCTGA TAAACTCAAT GAGCAAAAAC TTGCCCAACT AGAAGAGGCG AAGAAGTTCT TCCATCCAAC ACATCCAGAA

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AGATGTGGAA TCTCGTGAAG ACTTAATTAA AAATCACTAC ATGGCAAGNA TAGTGGAAC TACGTCTCAG TTGCAGCTGG
CTGACAGTAA GTCAGTGCAT TTTTATGCCG AGTGCCGAGC ACTGTCTAAA AGACTNGCCT TGGCTGNAAA GTCTA

SEQ ID NO:297: (Length of Sequence = 244 Nucleotides)

AGTACGGTIN NCGCTNAAGC TTGAINATCG RATTGCCAAT CINCATATTT GTGTTAGAAT CATTGTGTTT TGIGTCTTCA
TGTTTCTATA AGATAGGACC AATATTCTTT ATTGGGCTTT GATTTTATTT TGTAACCTAA ATGTATTAAAG GCAATAAATG
TAATTTTCCA CTAATAACTA TCATTATAGA TTGGTITACT ACCTACTGCT CAGCAATTTT TTTTCTTATC AAAATTCTTC
CTGG

SEQ ID NO:298: (Length of Sequence = 152 Nucleotides)

CCTGAACAGG TAATGAGAAA AATTTACACA CAAGTGATTT TGAAAACAGA ATGGGTTGCT TACAAATTAC AGGAAATGTT
ATAACACAAA CCAGAAGAAT TCAATGGAAG GCAATAAGGGAAAT GAAAATTATA AAAGTATCAN GA

SEQ ID NO:299: (Length of Sequence = 374 Nucleotides)

CGATGTTTTT AATGTCATCA CAGTTGTCT CAAAATGAGT GGTGGCATCA TATGTGCGGG AAATAAAGAT CTGGCTTTCT
GTCCCAAGT CTTTGGTAC CAGGAGGTCA CTGATGCTAA CAAATTTCTG TTCAATTGGT TCCAAGAGCT CCAAAGCTGG
TCTGATTTCC TTCTCAGGCT CCTTGGTTTC CACAGTTGTA CTAACATAG CAATGTACTT CCTTGTGCT GCTACATTGT
GCGCAAAGGA GATCATGCAG ACGTAGATAT CTGACTTTTC ATTGACTTTG GTTCTGTGGA ATAATGATCT GGCAGGAGTT
GGCATCATTG GTGTCTTTG ATGGGGGTGG CTGAGGGATG CAAATAACCT CTG

SEQ ID NO:300: (Length of Sequence = 365 Nucleotides)

GGCTCACCAA GCTCAGCAAG TACGTGTACT TCTTCGAGGC CTGCCGGCTG CTGCAGAAGA TGATTGACAT CTCCCTGGAT
GGCTTCTGC TGACTCCGT GCAGAAGATC TGCAAGTACC CTCTGCAGCT GGCCGAGCTG CTCAAATACA CGCACCCCCA
GCACAGGGAC TTCAAGGATG TTGAAGCCGC CTTCATGCC ATGAAGAACG TGGCCAGCT CATCAACGAG CGGAAGGGTA
GACTTGAGAA CATCGACAAG ATTGCTCAGT GGCAGAGCTC CATAGAGGAC TGGGAGGGAG AAGGATCTCT TGGTCAGGAG
CTCAGAACTC ATCTACTCGG GGGGAGCTGA CCTCGGGTGA CACAG

SEQ ID NO:301: (Length of Sequence = 224 Nucleotides)

GGTATTCAAA CAAATAGCCT GAGAATTTTG GGGGATCTG AAATAGAGTA CTATGCTATG TTGGCTAAAA CTGGTGTCCA
TCACTACAGT GGCAATANTA TTGAAGTGG CACAGCATGC GGAAAATACT ACAGAGTGTG CACACTGGCT ATCATTGATC
CAGGTGACTC TGACATCATT AGAAGCATGC CAGANCAGAC TGGTGAAAAG TAAACCTTTT CACG

SEQ ID NO:302: (Length of Sequence = 363 Nucleotides)

AGTTTCACTC TTGTTGCCCA GGCTGGAGTG CAATGGCGTG ATCTCGGCTC ASTGCAATCK GCACCTCCG GKTTCAGCG
ATTCTCTGC CTCAGCTCC CAAGTAGTTG GGATTACAGG CATGCGCCAC CATGCCCGC CAATTTTCTA TTTTCTGTAC
ACACAGGGTT TCTCCATGTT GGTGAGGCTG GTCTCAAACCT CCAACCTCG GTGATCCGTC CACCTCGGCC TCTCAAAGTG
CTGGGATTAT AGGCATGAGC CACTGTGTCC GGCCAGCTCA AACAAATTTA ATGCTTCTTT CAAGNCTATT AGAAACCTTT
AATTGCTTCT TAAGTTTCTC CCCCACCTAT GGAGGAAGCA TAT

SEQ ID NO:303: (Length of Sequence = 253 Nucleotides)

ATGCAGGAAS ATCTACCARG CAAATCGAAA AAAAAAAG GCAGGGGTTG CAATCCATCT CTCTGATAAA ACAGACTTTA
AACCAACAAR RRTCAAAAGA CACAGAGARG GCCATARCAT AATAGTAAAG CGGATCAATT CAACAAGAAG AGCTAACTAT

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SEQ ID NO:290: (Length of Sequence = 353 Nucleotides)

GGTTTTCATC TTCGGTTTAC AAAAGTCCIA CTATTATTTT ATTTTAACTT TAATTTAAAT ATCACCTACC TTAGGTAGAA
 GTTTTCCTTT GIGTAATATA ATATAAAACC GACATTTCTT GGGGGCATAA TAGTAAAGAT GTTAACATTT TTTGGTTCCT
 TTTGGATGCT GTATTTGTGC TTCTTCTGAA AGTGAATGTT GCCAAGATGG CTCATGTAAAC CCAGTTTGA CTAGGCTATT
 GATATTCGT CIGGTTAATT TATTGAACIG GCTTAAAGCT ATACATATTT CCTTTTACNIGTAA GATATTCATG
 ATATATTGGT CFACTGATTC ATAATATCAC TGG

SEQ ID NO:291: (Length of Sequence = 163 Nucleotides)

CCTGGTAGGC CTGCTACACA GTCTTGCAAC GNCCTCTGTG CTGGGCTTC TGCGGTGAGG CAGGGGAGTC TGCTTGCTT
 AGATGTTGGT GGTGCAGTCC CAGGACCAAG CTTAAGGAGA GGAGAGCATC TGCTCTGAGA CGGATGGAAG GAGAGAGGTT
 GAG

SEQ ID NO:292: (Length of Sequence = 397 Nucleotides)

ACGGGAAGGT GAGTATGTA GTATGINTGC CAGACAATGG TGTTTCCATG TCAATGGAGG TTTCTCAGAG AGAGGTGATC
 TGGCTGGAGA AAGCTTAATC TGGTGGCAAT GGACAGGTGA CTTTAAGAAG TGGGGAACGA GGAAGGAGG CCAGTTTGAA
 AATNATAACA AGGGTCCAGA CTCAGTGATG CAGCAGTGAC CATGAGAACG GAGCAGCTGC AGGTAGAAGA TGGAGACAGA
 ACTNGGGAGA TCTGGTGGAG GTAAGCCGCG TGGAAAGATG ATGTCAGGTT TATACCTAGA GGACACATGA TCCATTACAA
 AAGCCAGGGG NAACCTAAAG AGAAAACACT TAGAATTTTN GGAGAANAGG CTAGGGCTGG GCCTTAGACA TGGGCTG

SEQ ID NO:293: (Length of Sequence = 360 Nucleotides)

GAGGTAAAAT TTACATACAG TGAAATCCAA ATCTTAAGTG TACCACTAGA TAAATTTTGA TAAATGCATT ATGCCTGGTC
 TTCACACACC CTTTTCAATA TATAGAAAAT NTCCAGATAA TTTATTTTGT TGTTTTTTTC ACACACTAAG TTCTAGACTT
 TTCCAGGTCC GAGGGAACTA TTAGGGGGGA AAGTACTTGT NATAGTAAAA AAGATTTTGA GTGTGTTTGT TTTTAAGGTG
 CAGAAACACA TCGCAGATT AAGGTCTGCA ATCTCTGCTT TTGTTATTG TTCCAGTTT GATCTCAGTG ACATTACAAG
 CAAGCAGAAA CACTCAGACA TGAAATGGCC CAG

SEQ ID NO:294: (Length of Sequence = 321 Nucleotides)

TTTTTTTTCAG GNTTCAACCG TTTTATGGG AGGTTTTGTT TTCTGTGAAA TACACTAGAG GGTGGGGAAG GGGACACATT
 CACTTTGCAA GATAAGGGTT TCCCACCACT AAAGGAAAGG CATGGGGCAG GGCACACTGG GGTTTGGGTC CGTTTTCCCA
 CCTCCTTCG CTGGGCTCAC TTTTCTTTTC TCTCAGCAAG TACCACAGAA CACAAAGACA AGAAACAAAA CAGCAAATCA
 ACCTCCAACG GGGCCATGCC AAGCCTTCCC CACTCCCCCA GGCTGGGCAA GGGCTGGGAG GGGGCTGGGG CAGCTCACTC
 G

SEQ ID NO:295: (Length of Sequence = 165 Nucleotides)

GACACACAGC GCCTCCGGCC COGCACAGGG GGCATGTCCA GAGGTGCTGT GTGTACACAA CTGGTCTTCT AATTGGAAG
 GAGTTGGAAG GGCCTTTTGT TTGATGAAAA GTTGGAAACA GTGGCACATA TCTNAGAGGG AGGAACGAGG CAGCGTGGTG
 AAGCG

SEQ ID NO:296: (Length of Sequence = 315 Nucleotides)

CGAATACAGG TAGTGCCAG CTGGTTGGGC TGGCCAGGA AATNCTGCT GTGTCAAATA CTGCTGGCCA GGATGAAGCC
 ACAGCTAAGG CTGTGTTGGA GCCCATTCAG AGCACCAGTC TAATTGGGAC TTTAACCAGG ACATCTGACA GTGAGGTTCC

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GCCCCCTGTC CCAGACACAG GCACCCCAAA TCTCACTTTG GACAGAGCCA ACGTGGGGGG ATCCTCCCGG GCCTGGGCCT
GTCAAGTCTG CCTGCAGGAC CCTGCCATTG TGCTCAAATC ACAACCATTT TTTGCTTCCA ACATTTTAGG GTGCTTGTC
AGTGAGT

SEQ ID NO:284: (Length of Sequence = 340 Nucleotides)

CTTTGGAAAT GTAAATTGTT ACAAACCTAC TTTAGAGCAA ATTTAGTCAT CCTTCAAAAA TTAAATGTA TACTTATTTT
CTAAGAATTC GTTTGGCTCA CACAATTGTG AAAAGATAGA TGTACACCAG TGTTCATTAC AACAAATTAT CAACAAATCT
ATTATGTGCC AGACATTATT CGGAACCTCG GGAATACATA AGTGAACAAA GCAGATTCCT GATCTCAGGA CCTGGGGTCA
GGGGTCAGGA GAAGCCAAAA AACACGCTNG AGAAATACTT TATGCAGTGT GGGGGGAGTG CTACCAGCAG AGCAGGGGAT
GGNGATGTGA AATCTTGTTT

SEQ ID NO:285: (Length of Sequence = 335 Nucleotides)

GACATTCACG GAGGTGGGTT CGACCTCCGG TCCCCCACC ATGACAATGA GCTGGCAGAG TCGGAGGCCT ACTTTGAAAA
CGACTGCTGG GTTCAGGTACT TCCTGCACAC AGGCCACCTG ACCATTGCAG GCTGCAAAAT GTCAAAGTCA CTAAAAACT
TCATCACCAT TAAAGATGCC TTGAAAAAGC ACTCAGCAGC GCAGTTGCCG CTGGCCTTCC TCATGCATC GTGGAAGGAC
ACCCCTGGACT ACTCCAGCAA CACCATGGAG TCAGCGCTTC AATATGAGAA GTTCTTGAAT GAGTTTTTCT TTAAATGTGA
AAGATATCCT TCGCG

SEQ ID NO:286: (Length of Sequence = 399 Nucleotides)

GCACAAATAT TAAAAAGAGG CCACCTAAAT TCAACTCTCC ATGGATACAG TGTCTGTGGC AATGTTTAAAT TAGAGATTAA
AATTGAGGAA TTGAATAATT GAGGTGCTA ATGAATTTGA AACTCAGCA AAGCAAGGAG AGCTGAGCGT TTTTCCGACT
TAGCTTTTCT TTCTTAACC CTTTTCTCAT TTCTACTAT TATCACAINT CTGGCCTTGA CTGCTGAGTT TATTACTACC
CATAACCTG GCCTAAGTGG AAACAAAAA GCTGTAGCCT CTTTGTGAG CTCCTGGAGA CATTGTGCT ATTGGATTAT
TGACATGTT AGAAGCTTGC AGTTGCAGGA GGCTGACAAT GATGAAATG AGATATGNTG GGCCACCAGC CTTTTCTGT

SEQ ID NO:287: (Length of Sequence = 294 Nucleotides)

TTCCAGTTGA ATTCACCAAT GGACAAAATG AGGAAAACAG GTGAACAAGC TTTTCTGTA TTTACATACA AAGTCAGATC
AGTTATGGGA CAATAGTATT GAATGATTT CAGCTTTATG CTGGAGTAA TGGCATGTGA GCAAACTGTG TTGGCGTGGG
GGTGGAGGGG TGAGGTGGGC GCTAAGCTTT TTITAAGATT TINCAGGTAC CCCTCACTAA AGGCACCGAA GCTTAAAGTA
GGACAACCAT GGAGCCTTCC TGTGGCAGGA GAGACAACAA AGCGCTATTA TCCT

SEQ ID NO:288: (Length of Sequence = 391 Nucleotides)

TCTACAGATG AGGAAAGCAA GCCTCAAGCA AGGGGGGCCT GATCCTTCC CTGTTCCCTG TGTATTCCCT GTCTGTGGCA
AAGCCCATG CCTGATTCT CTCTCTTTA CTTTCATGTT GAGAAGTAGT TTCTTCTGC AGTTTATTTA ATTTACTGGC
AAAATGACGT ATTTTTTTTT CAGCAATGTT TCAGCTAGAT ATTTGCTTTA TGCATGTAAT GTCAATGAAG TACTCATAAG
TTTTCAAGAA ATGACTGATA TAAATCATGT GTCCACTAC ATAGTCTAAA TATTTAGTAT TTGGTCACT ATTTTAATAT
GTTCAAAATC TGTAAACAA GNCATAGTCA CTATGTGAAG ATAAAAATAG NCAAGTTGC ATTATGACTT T

SEQ ID NO:289: (Length of Sequence = 198 Nucleotides)

CTTATATTCT ACTTATTG GTAAACTCA GAAACTAACA ATTCACATCC TCCCACCTTC TTCTTTCCGA AGAAGGCAGT
TTGCAGAGAC AAAAGGGCTG TGGCGTGGGG ATCATCCACC ATCTCCAGGT TTTACACCCA GGCTACCCAT GGCTTGGCAG
TCAGGCCTCT AGGCTGATTG CTCTCAGAGG CAATAGAA

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CCCGTGGTCC AGATCATTTA TAGTGACAAA TTTTAGAGAT GTTTATGATT ACTTCCGAGC TGGTCCTGCA GCGTTGATGA
AAGAAGTGAA CGAGCTTTTA AGTTAACCCG GGATTGCTAT TNAGTTAAAT GCAAGCCAAT T

SEQ ID NO:277: (Length of Sequence = 206 Nucleotides)

TTAATAOGAC AGGGCTGGCG CCGAGTAAT TCAAGCCCTT CGGAAGTGTG ACCGGCTGCC AGGCCTGGGA TGCAATCCTG
GAGGCGGGAG ATTGGGCTIN AAGACTGGCT CGAGCCGCC AGGGGCTCCA TGGGAGACTA ACCGGGAAGT YCCAGCCGTC
CCAGTGCCGT GACGTCCCCC CTGGTGGGG OCTGCACCG ACTACT

SEQ ID NO:278: (Length of Sequence = 260 Nucleotides)

ACCTGTAAAT CCNGCACTTT GGGAGGCTGA GTTGGGCAGA TCACGAGGTC AGGAGATAGA GACCATCCTG GCTAACACGG
TGAACCCCA TCTCTACTAG AAAAATACAA AAAATTAGCC GGGCATGGTG GCGGGCGCCT GTAGTCCAG CTACTCGGA
GGCTGAGGCA GGAGAATGGC GGAACCCG GAGGCGGANT TGCAGTGAGC TGAGATGCGC CCGTCTCTCC AGCCTGGGCA
ATAGAGTGGG ACTCCATCTC

SEQ ID NO:279: (Length of Sequence = 308 Nucleotides)

GTGTCTGGGC TCAGGGTTGG CCAGCTTGCA GAGGAGCAAG CTAGTAGAAA TATTGCAGGG TTCCCAAAC CAGGTCAAGC
AAGATGCCAT GTCACCCCTG AGCATGCCCTG TCTTCCAGG GGTGTACCTC TTGGCTGGCA AAGCCAAGGC CAGTGGGNAC
TTGTATAAAT CACATGGGTA TGTCCTGGT TCAGTGATCT TGGAGTGATG ATGGTAACTN ATGAACAGAG AACTTTTYAG
AACTTKGGTC CTGTCTTCT CCTGAACCT AGACAAGTTT CACCCCTCCT CCGTACCCA ACCCCATT

SEQ ID NO:280: (Length of Sequence = 402 Nucleotides)

ATTTTAGCAG CTTTCTGAA ATTTAAATA TATGTGTAAG TATCTCATTT ATATGCATTT CTAGTTTCTT TATACAACAG
AATAACTTCT TTTACATCAA ATTTCTGAAT TTGACTAAAT TTAGAAATAA TGAATCTCA TCCATTAAAT ATAGTCATAG
AAGGAAGGAA ATATGAAAAT TAGGATTTCA GATGTTTGA CATAAAGAT AATTTTAAAC ATTGTCAGTA ATCTATTCT
TTMTTTTTC GAGACGGAGT TTGCTCTGT CACCCAGGCT GGAGTGCACT GCGCGGTCT TGGCTTACTG CACCCCTGTC
CTCCAGTTC AAGTGGATTC TCCTGCCTCG NCCTCCTGAG TAGCTGGGT TACAGGGGCA TGCCAACATG CCGGGGCTAA
TT

SEQ ID NO:281: (Length of Sequence = 313 Nucleotides)

GAGAATCCGT CTTAAAAAGA AAAAAAGAAA ATTATAGAGG GAGATGAGGT GGGACAGAGT CTGGCAGTTC ATCAGGGGGA
CTGAGAAGGT GGCATTGGA GGAGAGGAGG CAGTGAGCTG TGCAGTGTC AGGCAGCCAC CCTTCCAGC GGCCACCATG
ACGGTGTCTT CATGTCTTA ACCATTAGTA ATCATTCATT CATTCAATCA TTTATCCGAC GTCAGCTGGA GGCCTGCCC
GNGGGCATG CGCTTAGATT TNGGAGGCT TCOGGGATGC TTGCGCTCCA ACGGGGGAAG GCGCACTTGG GCT

SEQ ID NO:282: (Length of Sequence = 217 Nucleotides)

TGACCTCAGT TGATCCACCC ACCTTGGCCT CCCAAGTGC TAGTATTATG GCGTGAACC ACCATGNCCA GCGAAAAGC
TTTGGAGGGG CIGACTTCAA ATCCATGTAG GGAAGTAAA TGGANGGAAA TTGGGGTGCA TTTTCTAAGG ACCTTTCTAA
CANATGGCTA TAATNTAAGG GGTTAGGGT CCTTTT TTTTCAGGGA TACATTT

SEQ ID NO:283: (Length of Sequence = 327 Nucleotides)

TAGAGAGCGC TTTACTCTG GTCCATGGC GTAAAGATGT GGCTGGGCT GACAAGGCTC AGCCTCCAGT CTTAAGATGG
GCACAGAAGG GCAAGAAGTA AGATGACGAG TCCAGAAAT AGGACAAGCC ATGAGCCAAG GCCTGGTCTG AGCAAGGGCA

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GCGGCCTCCT CCCTGGTGTC ATATGTGCGC ACGTCTGTCT TCCTGCTTGA CTTTGGGGAT CTCGATGATC CTGGTGCTCC
TGTGTGCTTT CCTGATCCCC TGCTCTCCA GAGATCTTGA CAGAACTGGA GCGGCA

SEQ ID NO:271: (Length of Sequence = 346 Nucleotides)

TGTTACGTT CCCCTTCTTT GTCTTCTTT TTCTATCTT TATCTATCT TCGACTCCTC TCCTTTTTC TCTCTGTTC
TTTAGCCTCA CCTTATGCT TATGACTGTA CCCACTAAGA TTTCACGTT GATCATCAAT TTACGCTA TCTCGACTCC
TACTGCGACT GGCACGATT GTTCGTCTAT CCCTTGAGCG ACTTCTACGA ATGCTTATGA AAAAGAATCA AGTTGNCAC
CAAATGTTT ATAGCAGTAG GAAATTTCTT TTAGAGACTT CTGATGGGAA ATTTGAAGTG TATGTTGCTA TCAGATCAAG
TGCAGGAGAG GTATAAGGCT ACTGGA

SEQ ID NO:272: (Length of Sequence = 394 Nucleotides)

GTGTTGTTG TTGAGTCGA GTCTGCACT GTGCCCTGG CTGGAGTGCA ATGGTGCAAT CTCGGCTCAC TGTAACCTCC
GCCTCCAGG TTCAAGCCAT TCTCTGCTT CAGCCTCTTA GTAGCTGGGA TTACAGGCAC CTGCCAGCAC ACCTGGCTAA
TTTTTATAT TTNAGTACA GACAGGGTT CACTATGTTG GCCAGGCTGG NCTTGAATC CTGACCTGT GATCTGCCA
CCTCAGCCTN CCAAAGTTT TCAGAATTT TTAAGGAAAC ACTTTTAACC CTTAAGGCTT TCTTTCAAAC TCAGATCCCC
TTACACAAT GATCAGACGT GGCAAAGTT TGCTTCAAAG TTTTGGACT GGGTTCCAC TTTAGGCTTA CTGA

SEQ ID NO:273: (Length of Sequence = 259 Nucleotides)

CAACCTGTAC CCAGGCTGCG AGAACGTRAG TTTRAGSAGC CGCAGCATGA TGTCGAGCC GGTCTTACC AAAGGRATGC
TGGAGGTGT TKTGGCCCG ACCCACCACC CGCACTGCTC GGCCGATGAC CAGTCCACCA AGGSCATGA CATCCAGAAC
GCTTATTTRA ATGGAGTTGG CGATTTGAGC GTGTGGGAGT TCTCTGAAA TCCTGTGTAT TTCTGCTGTW ATRACTATTT
TGCTGCAAAT AATCCACG

SEQ ID NO:274: (Length of Sequence = 348 Nucleotides)

TCCAGTTGT CCGGATTGTA ACTCAAAGG TGGAATATCA AGGTGTTTT TTTCATTCCA TGTCGCCAGT TAATCTGTCT
TTCTTGTTT GGCTGGGATA GAGGGTCAA GTTATTAAAT TCTTCACACC TACCTCCTT TTTTCCCTA TCACTGAAGC
TTTTTAGTGC ATTAGTGGG AGGAGGTTG GGAGACATA CCACTGCTTC CATTTAATGG GTTGCACTG TCCAATAGGC
GTAGTATCCG GACAGAGCAC GTTTCAGAA GGGGACTCT TCTTCAGGT AGCTGAAAGG GGAAGACCT GACGTACTCT
GGGTAGGTT AGGACTTGCC CTCGTGGT

SEQ ID NO:275: (Length of Sequence = 396 Nucleotides)

GTITGGTGAA TTTGGTCTGT GATAAAATG GAGTTCAGA AACAAACAGG AAACATAAG TGCCCCCTCG CCCCCAGGTC
ACCGAGTGG CAGGGCAGT ACCGCTGCTC TCAGGCTGCC CAGTGTGGAC CTGCTGTG GAATGCTCCT CTTCCAGTTC
CCCTGCTCC TGTGTCCAG CCACATGCAC CTCTCTCTA CCTCTGGGAT CCCTGCACCA GGTCTGCCCC TGTCTTCTCA
GGGCTGCTCC TMTGGNCCA CAGGACCTCA GCTGGAATGT TGCTCTCTCC AAGAGGCCCT CTTGACTATT CAGCTCACAG
TGGCCACCA GCCACAATCT GCCATGTGCT TTGGGGGATT GTCTGTAAAC TGGCAACATA CTGGCAGCCC ATAAC

SEQ ID NO:276: (Length of Sequence = 381 Nucleotides)

GGTGTGGGG AGGCTGCGCA AGGGGGCGAG CCGGGGAGC CGGCGCAACC CCGGCCCCAG CCGCACCAC CGCGCCCCA
GCAGCAGCAC AAGGAAGAGA TGGGGGCGA GGCTGGGGAA GCGGTGGGT CCCCCATGA CGACGGGTT NTGAGCCTGG
ACTCGCCCTC CTATGCTCTG TACAGGGACA GAGCAGAATG GGCTGATATA GATCCGGTGC CGCAGAATGA TGGCCCCAAT

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TTTTGCTGT CAACAGACAG TTTATTCTAT ATACAAACAC AATTTTGTAC ACTGCAATTA AATAGAATGG AATGAGCGCT
 CCTCCGCAAT CCTCCCCGAG TGACTGGTIT GGCOCGCGGC CACTCCATCC CCGAGTGGGA CTGGACCAGG GCCTGGINIG
 CTGCCACTGA TGTTGGNGCC TGCACCCAC GTCCCTATGC CCGAGGCGCA ANTCIGCTCT CCGGGGACC CCAAGNCTGG
 NGCACACGGG GGGAGGGCGG GGCCATGGAG AAGGCACTGC AGGGAGCACC AGGCAGAGCC GTGTTGAGGC CGGCCGG

SEQ ID NO:265: (Length of Sequence = 270 Nucleotides)

GCAGAGCAGG TGGAAGTGAT CAGGAACCAT AGTTGACAGT TCCAATCAGT AGCTTAAGAA AAAACCGTGT TTGTCTCTTC
 TGGAAATGGTT AGAAGTGAGG GAGTTTGCCC CGTTCTGTTT GTAGAGTCTC ATAGTTGGAC TTCTAGCAT ATATGTGTCC
 ATTTCCTTAT GCTGTAAAAG CAAGTCCGCG AACCAAACTC CCATCAGCCC AATCCCTGAT CCTGATCCC TTCCACCTGC
 TCTGCTGATG ACCCCCCCAG CTTCACCTCT

SEQ ID NO:266: (Length of Sequence = 297 Nucleotides)

ATGAGGCGAG GCCTGCGAAG TGCTGGCAT GCAGCAGGTG CTAATGAGTG TTGCAAAGGT GATGTCACGC AGGCAGCTTC
 CCGTGGCCAG AGAAACATG CAGAGAAGGG ATAAGTAGGG CTTAGTACT TTGACGGGTC AATGGAAGAA TGACCCAAAG
 AAGGCTTCAA GGCCAGGCCT GCAGTTCTCC ACCACAAAGG CCTCACTGA TAGCACCAC TCCCCACAC TCAGCTTTNG
 GGCTAGGTC TGGGTACCC AGCTAGAAGC CACAGGACCC TGAGGCGTCC GAGGGGT

SEQ ID NO:267: (Length of Sequence = 387 Nucleotides)

CTTGTTTTCA TCATGAGCTC GATCAGATGT CTCTCGATCT TCAGACTGGT GGTGCTCTAT AATGTCCTGT GCACGCATTC
 TTGAGCTTTC CAGGATTTCT GTCTGTCTC TCTGTTATC TACAGAAGAA ACTTCTCTCT TGAGTTCTGT TTCTTCTGTAG
 CGCCTTGAAC TCTCTTCTCT TTCTGGTTTA CGATCTCTCT CTTTCCATCT ACCCTGTCTG TCTTCTGTGA GGTGCGAGGG
 ACTAAGAGAA CGAGATTCIT GAGGTCTGAC AACTTGCTC AAGAGTCTGT GTTTTTTCAT TTNNATCAT CTTCACTGTT
 GTAGGCATCA CTGTCCGGAG AATGTTACG CCGGCGCTTT CGGGGACTG TCTAGGGCTG GGACTCC

SEQ ID NO:268: (Length of Sequence = 318 Nucleotides)

CCTGAAGGTT ACCTCTTTGG AGAGAACATG GATCTGAATC TCCTGGGCG CCGCCCGGTC CAGTTTCCCT ACGTCACTCC
 TGCCCCCAC GAGCCCGTGA AGACGCTGCG GAGCTGGTGA ACATCCGCAA AGACTCCCTG CGGCTGGTGA GGTACAAGA
 CGATGCOGAC AGCCCCACCG AGGACGGCGA CAAGCCCGG GTGCTCTACA GCCTGGAGTT CACCTTCGAC GCGATGCC
 GCGTGGCCAT CACCATCTAC TTCCAGGCAT CGGAGGAGTT CCTGAACGGC AGGCAGTAT ACAGCCCCAA GAGCCCT

SEQ ID NO:269: (Length of Sequence = 422 Nucleotides)

ACATGTCTAT TCAGGTCTTT TGCCCAITTT GAAATAGCAT TGCTTGTCT TTTGCTGGAT AITTAACCCCT TGTCAGGTGC
 ACAGTTTGA AGTTACCTTT TCTCATCTA TAGGTTATCT CCTCACTCTT GATGTTTCT GTTGTGTGC AGTAGCTTTT
 AAGTTTGGT TAATACCAT GTGTTTTCTC TGCTGCCCTT TTAAGTTTCA CTGGGTCAA AGTTTAAAT TTGTGAATTC
 CTATATTTTT AGGGCAATTC TCCTGCCACT GTTGAATTA TGCTCAATC TATGCAGTAG AATATTAGTG TGAAATGCTT
 CTGTACCAAT GGAGATGATG CTGGATGTC TCTATCATAA ACCCATACCT CATCAACACA AACTGCAATT ACACAAGGGC
 TCTATATCAT GGATCTCCAT TT

SEQ ID NO:270: (Length of Sequence = 376 Nucleotides)

GAAGAAGAGC CCAGACCTAG GGGAGTATGA TOCACTTACC CAGGCTGACA GTGATGAGAG CGAAGACGAT CTGGTGCTTA
 ACCTGCAGAA GAATGGAGGG GTCAAAAATG GGAAGAGTCC TTTGGGAGAA GCGCCAGAAC CCGACTCAGA TGCTGAGGTT
 GCAGAGGCTG CAAAGCACAT CTTTCAGAAG TCACCAAGGA GGGCTACCCC TCAGAACCCC TTTGGGGCCT GGAACAGAAG

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GAAAAGAAGG AAGGAAAGAG GGGAGGGAGG GAGGAAAGGA GAGAGGGAGG GAAAGAAGGA GAAAATGCTG GAGCAAAGGA
GGTTGGTTAC ATGATTTCCTC TAATGGCAAT GAGCTGCTTT CTGGATGAAA TACAGAATCA GAGCGAGACT CCGTCTC

SEQ ID NO:259: (Length of Sequence = 361 Nucleotides)

AAGCAGATAT AAATGGGACC ACTGTGAATC AAAGGGGAAA AATTCCAGGA AAAAAAATT CCAATAGCTT CACAGTTTAA
CTGAGGTTTT GGAAAACTT AAGTGAATC AGCTGATGTT TGAATATCT GTCTACATTT AATTAGATGT GTGTATTTTA
CCAAGGAGGC ACAAATATGT AGTTCTGTAG ATTTTAATAC TAACTTTTCC AGTAAGAAAA ATAATACCAG GTGATTTCAA
AAAGGSCAGT GATCTATAAA CACTCAAAT GCATCTTTGA ACAGGGGAGC AGAAATAGCT AATTTAATGA AAACAAACCT
TAAGCACTTT ACTTGGCTTC TAATAAGGCA TCCCAAGAAA A

SEQ ID NO:260: (Length of Sequence = 349 Nucleotides)

CAATACATGT ATACAGTGA CACTGATCAA ATAAGAGTAA TTAGCATATT TATCACCTCA TTTCTTTTGT GGTGAGAACA
TTTAAATCC TTTCTTTTGT CTATTTTGAA ATATACAGTA CATGCTATT AAGTATAGTC ATCTGGCTGT GCAATAAAC
ACCAGACTT ACCCTCTCTG TCTGTGACTT TGTACCTCTG TCACCACTCC TCCAATCTC TAGTAACTAC CATTCTACTC
TCTACTTCTA TGAGCCTGAC TTTTAAAT TCCACATGTA AGTGAGATTA CATGGTATTA TTCTCTCTGT GGCTGGCTTA
TTTCACTTTA ACATAATGTC CTCTAAAT

SEQ ID NO:261: (Length of Sequence = 415 Nucleotides)

GGAAGATGAG GATCTAGGTG TGAGCGTGCA GAGCCCTGAG GCTGGGCAGG CAGGGAGCTC TGCCTGCACA ATGATGTAGC
CATGTGTGGC CACACCAGCA CTGGGCAGCA CCTCTGGGGA GGGGGCAGG GCAAGGACAA CTGGAGAGAC AAAGCCAGAT
GGGGCCACGT CCTTAGAAGT GTGTGTGCAC GCACATGTTT GTGTGTGTGT GTGTAATACG CAGGGCAGAA ACACACCATG
TAGGTCAGGC AGGACAGAAA CACATCATGT AGGCCAGGCG TGGTGGCTCA GGCTGTGAAT GCCAGCACTT AGGAGGCCA
AAGTGGGCGG ATCACCTGAG GTCAGGAGTT CGAGACCAGC CTGSCCAACA TTGCAAAACC TCATCTCTAC TAAATTTCTA
AAATTAGCCA GCGGT

SEQ ID NO:262: (Length of Sequence = 382 Nucleotides)

GGCATGGGGT CTGGCTTTAA TGGTAACTG ACGTGGGTCA CTGAACTGT TCAGGCTGAT CTTGAACTCC TAGGCTCAAG
TGATCTGCT CCCTTGGCT CCCAAAGTGC TGGAAATTACA GGAATGAGTC ACAGCACCCA GCCGGCTGTG TTTGTTTTTT
TGTTTTTTAC CCGACAGGT NCTCAGTCAG TCGTTAGCTG GAGTGAAGTG GCGTAACACA GCTCACTGCA GCCTTGATCT
CCTGGGCTCA AGTGATCTT CCATTTCTTC CTTCAGAGT AACTGGTACT GCAGGCCAC GGCACCACAC ATGGCTAATT
TTTAAATTTT GTAGAGACGA GGTCTTGCCA TGTGTGCTCA GGCTCCAGCT GTTGTATTCT TT

SEQ ID NO:263: (Length of Sequence = 447 Nucleotides)

TGTATCAACT CAGAAATTC AGAGAGCTT TCCTGGCTGA AAAGATGTCC AAGGATCATC TCCGGAATGG AAGAGGTGAG
GCCGTGTAGC TTGTGGGCTG CCAATCCAT CCAACCTTG GCATTGGGAT CAATGTTGAT GAGGACAAGA CCTTCAACAG
TGTCCGGGTG GTTAAGAGCA TATCTCGCCA GGATGTAGGC TCCAGCTCCA ACACCAACTC CAATTATTGT AGAGAAATTT
AGGTACTGCA GGACGCAAGG GATCATGCT GCAAGCTGGT CCAGAGATGG GTACTGATAT CCCAAAGGGA ACACAGGGGC
TCCCTCTTCC ATTCCAGGGG CATCCACATG GACCCGCACA AAGTCTGAA TGATTTCTCT CATGCTCTCG AACTKGAACA
GTGGCTGGAG GAAAGATTTA TAGTTGAGTC CACATCGGGT AGGTAAG

SEQ ID NO:264: (Length of Sequence = 317 Nucleotides)

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SEQ ID NO:252: (Length of Sequence = 314 Nucleotides)

CCTGAACAGT CTGTTTCATT TGACTGTTTG GGGGTCTCCC AGTTTAAAGCA AGATATTTAA GCCTTATTTT TCTTGGCATG
 CTGGATTCC CCAGTAAAAA AAACCTCTGC CCTGGGCTGA CAATCAAAGT TCTGGGAAGT AATATGGATA AGCAAGCTGG
 AAATGGAGAA GGCTATTCAC TGTCCTGGG TCTACTGTT TCTGGNTGG GAACTGCTTT TCATTAGGC CTGGTGTGCC
 CTGGAAGGGA NGAGCCTCTT GCAGAGACTA CAATCTTGA TGGGTCTTT GCCAAGTTT AAGGTAGGAA CCGA

SEQ ID NO:253: (Length of Sequence = 293 Nucleotides)

GAACACTCTG CTCCAGCCAA GGTGGTGAGG GCAGCTGTTT CTAACAGCG CAAAGGCAGC AAGCCACAGT CCCACAAGCC
 TCAGCCTACC CGTAACTGC CACCAAGAA GGACATGAAG GAACAGGAGA AAGGAGAAGG GAGTGATAGT AAGGAGAGTC
 CAAAAACCA ATCAGATGAA TCAGGGGAGG AAAAGAATGG AGATGAGGAT TGCCAGCGAG GGGGGCAGTA GAAGAAAGGA
 AACAAACACA AGTGGGTTC ATTACAAATA GACATGAAGC CTGAAGTCC CAG

SEQ ID NO:254: (Length of Sequence = 413 Nucleotides)

CTTTTCTTA ATATATTAA ATTTACCAAG GCAAGACAGT GATTTATGGA CATTTAAATT AGTTTAGCTT TGTCTGCTG
 TTCTAAACA TTGTGACTG TCTGATAGAC TTTTAAAAA CAGTCTTTT CCAGGATGAT TTATGATATG CAGTATGTT
 TATAGATGCC CATGGCTTAA CCTTGAAAG TCAATTAAGT GACACAATTA AGAGAGATAT GAATAGTGGT AGAAAAAGCA
 TGTACTCTGG ATAAGTGGG GTAAATCTAG TATTTGTTAT TCTGTGAGT AATATTGICA NTAGTATTTT TTAGAAGGTT
 TAATTTTFTT ATGGGTTATA AATTCATGTC ACTCTCTGC AATGGGTACC ATCAGTGGGA ATGCTNGAAT TATCCATGCT
 TTGGGGGTTA AAA

SEQ ID NO:255: (Length of Sequence = 376 Nucleotides)

GGGTCCAGGG GAGAATCAAT ATATCTAGTA TAGTTTATAT TTGTACCTTC TCTCTTAAG AGTTACAGTG AGTACTCTA
 CTCTCAAT GGAGCACTC TCTCCAGGAG AGTAAGAAGA TCACATAAT AGAAAGTGAG CTTTGGACTC TAACAGACAT
 AGGTTCAAT TCAACTCTGC TACTTAATAT CCATATTGGT TTGAGTTATT TAACCTTGAC AATCCACACT GTAAATGGG
 TAAATAATA ATACCTCTC CTCAGAAGTG TTACAAAGTT TATATGAAT AATGTGCTTA AAAAGCTGGG TACATAGTAG
 GAGCTTAGTC ATGTTTATT TTCTCCCTCA TACCATACA TGTTCATTC CTACTG

SEQ ID NO:256: (Length of Sequence = 241 Nucleotides)

GTAGAGATGG GCTCAATATK TTGCCAGGC TGGTCTGAA CTCTGAGGT AGGAGGATCG CTGAGCCTG GGAGACAGAG
 GTTGCACTGA GCGAGATCA CGCCACTGCA CTCTGCTG GGTGACACAG TGAGACTCTG TCTTAAACAA AACAAAACAA
 AAAAAGGCCA GCGCAGGGG CTCACACCTG GTAATCCAG CACTTTGGA GCCAAGGTG GGTGGATCAC CTGAGGTCAG
 G

SEQ ID NO:257: (Length of Sequence = 406 Nucleotides)

CAAGGGTGT CTTCGCCAGA TCACTGTTAA TGATTTGCTT GTGGGAGCT CCGTGGATGA GGCTCTGGG CTGGTCCGAT
 TAAGAAAACC AAGAGAGGCC GGGCAAGGT ACTACGCTT GTAATCCAG CACTTTGGA GGCAGGAGTG GCGGATCATG
 AGGTCAGGAG ATGAGACCA TCTGGCTAA CACAGTGAA CCGGTCTCT ACTAAAAATA CAAAAAATT AGCTGGGCAT
 GGTGGCACGC GATGTAGTCT CCAGCTACTA GAGAGGCTAA GGCAGGTGAA TCGCTTGAAT CCAGGAGGTG GGGGTTTCAA
 TGAGNCCGAG ATGTACCAC TGCACTCCAG CTTGGGCAA CAGAGTANGA CTCTGTAACC CCAACCAAC CCNCCAACCC
 CCGGCC

SEQ ID NO:258: (Length of Sequence = 157 Nucleotides)

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TTCATGCTCA TGTAACCTTC TTAATAGTGC CTGTCTGCT GGGTTTGTAG CTGTAAGAGT TCTGCAAACT GGCCCTATAA
 AAATATTGAT GCTGTCCATT AAAATGAATC TCTCTCTCTC ACTCAGTCTC TCTCTCTGTC TGTCTCTCTT TCTTCTCTCT
 CCTGCCATGT GTGTGCTCT CTCTACTCCT CTGATTTTGN CCTCTCTCTC TATTCTGCTA CTCTCTCTCC TCTCTCTCG

SEQ ID NO:246: (Length of Sequence = 269 Nucleotides)

GGTTTCACCA GCGTTTAATG TGCTCTGATG TTGACCGTCC CTCINAGINT TCTGGGGAGG AGGGGGTGGG GGGGAGGGTC
 AGGAAAGCAG GCTCAGCTTC CAGGGTCAGG GAGTGTGGG CCCAGAGGGG CTGTACAGT GGATGCACCC TGCCCCCTCC
 CTCGCCAGAC CCGAGGGTAG GGCAGAGGCA CCTCCTCGNC AGCCINTGGG CTGCACCCAC AGGGAATNGA GGGGAGGGGC
 ACCATTACCA CTGGACCCAC CAAAGACCC

SEQ ID NO:247: (Length of Sequence = 297 Nucleotides)

CTATTCAAAG TTTACTGACC TCCCCAGCCA GGCAGGCCAA CCCTTCCGAG CAGGGGAAAT GTCCATCTAG CTGCCCTCTG
 CTGGGTTCGA GCCTATGCCA TGAGAGGGTA CTGGAAGCAG GAGGGAGCCC TGGCTAGGGC AGGCCTTAAA CGCAAGGGAA
 GCTGAGCAGA GATCTGCACA CTCAACCCCA TTGATATTCT TCTCTCTCTC CAGTCATGGC CAGCGTGTG GTGACTAGAC
 CGGTGCCAAT AGTCCGGTTC CCATCTCGCA GGGTGAAAAG ATGGCCTTTC TCTTAAG

SEQ ID NO:248: (Length of Sequence = 281 Nucleotides)

ACAACAAGCA CACCAACTAT ACCATGGAGC ACATCCGGT GGGCTGGGAG CAGCTGCTCA CCACCATTC CCGCACCATC
 AACGAGGTGG AGAACCAGAT CCTCACCOCG GACGCCAAGG GCATCAGCCA GGAGCAGATG CAGGAGTTC GGGCGTCCCT
 CAACCACTTC GACAAGGATC ATGGCGGGGC GCTGGGGCCC GAGGAGTTC AGGCCTGCCT CATCAGCCTG GGCTACGACG
 TGGAGANCGA CCGGCAGGGT GAGGNOGAAG TTCAACCGCA T

SEQ ID NO:249: (Length of Sequence = 383 Nucleotides)

AGCGCATCCA CACCGGGGAG CGGCCCTACC CTGCTCCTA CTGTGGCAGG AGCTTCCGCT ACAACAGAC ACTCAAGNC
 CACCTCCGTT CAGGCCACAA TGGAGGCTGT GGGGGTGATA GTGACCCATC AGGTCAGCCA CCAACCCAC CAGGTCCCT
 CATAACTGGG CTTGAAACTT CTGGCCTGGG TGTAACACT GAAGGCTCTAG AGACCAACCA GTGGTATTGG GGAAGGGAGT
 CGAGGGGGAG TTTTGTAAAT CCAATCTCT GTGGNTTCAT GCTTTGTATA TGCTCAGAC AGGGCACAAT AATCCAAGAG
 AAGGTCGTG AGCCCNATC CAACCCAC AGTAATTATA ATCTTGGCAC ATCAATGGAA TTT

SEQ ID NO:250: (Length of Sequence = 397 Nucleotides)

GIATCCTACG TTACAACAAT AATATCATGG GAGAAATAGA AATAGCCTAG TTTGCTTCCA ATAGAACTG CTTTTAACAT
 GGGCTGTATA TAAAAATATT AAAGAGAAAC AAAACTGTAC ATTTCCTCAT TGCTCCGCTA CAGACAACCC ATGTCATAAC
 CTTGTTGCAA ATATTTTCTT CCTATAGCAG TAAGTACAGC ATTAGAAGGT GATTAGAGAG TCTGTTGATG AAACACAAAT
 GTATGTTTTT ATTGATTTTT ACTTTAGAAC ACTACAGAGT TCCTGGGACC GGGGTGAANG GCATTTAGCT GGGGTGGTTT
 GTGTGGGGGT TAAATACCTT CCCACTTGCA AGTGACTTGC CTGTCCTCCG TGCGGGAATC CTGTTCCTTG GGTGGGA

SEQ ID NO:251: (Length of Sequence = 276 Nucleotides)

GGCCATAAAA GAAAGAGCCT GTTACCTATC CATAAACCCC CAAAAGGATG AGACGCTAGA GACAGAGAAA GCTCAGTACT
 ACCTGCCTGA TGGCAGCACC ATTGAGATTG GTCCCTNCCG ATTCCGGGNC CCTGAGTTGC TCTTCAGGNC NGATTTGATT
 GGAGAGGNGA GINAAGGCAT CCACGAGGTC CTGGTGTTCG CCATTCAGAA GTCANGACAT GGACCTGCGG CGCAGCCTTT
 TCTTAACAT TGTCTCTCA GGGAGGGTTC TACCCT

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TGACCCCACT GTCCCATAT ACAAGGGTTK GGGGGCAAGA GCACTGGCT ACTCCAGCA AGGGRAAAT GGGAGGAGCA
GTAGAAA

SEQ ID NO:239: (Length of Sequence = 285 Nucleotides)

ATTATTAGT TATGGTGCTT TAAACCTATC AAAATAGTTG TAAGTAAATG GATTTCTTGT NCTCCCAATA ACAATTCTCT
GAGCTAGGAT AGATGTCCTT CTGGCCATTT TACAGGTGAT GACACTGACA TAGGGACTGA GTGGGTAGCT TAAGTNCAT
GGTTACCAGG AGCAGGACCN ACGTTTCTTG NCTCCAGTC TCATCTGTT TTCCACTGAC CAGGTGGTT GCTCCCTTG
AAAGCAGTCC CTGAGAGTTG ACTTAGAAGT TCAGGGGAA GAGGT

SEQ ID NO:240: (Length of Sequence = 349 Nucleotides)

TTTTGCCATG TTGGACAGGC TGATCTCAA CTCTGGCCT CAAATRATCT GCCAGCTTG GCTCCCAA GYGCTGGGAT
TACAGATRG AGCCACTGCA CCCAGCCTGA CATGCCATAG TTTCAGCAIT TTCTTGGSCA ATGATCCAAG CTGAAGGCTG
GTCTGAGGGA TCTSAAGAAG CGTATGAGTT GGAAGAGAGG GACAGAAAGG AAGAAGACAT GTGAAGAGAG AAAAGGAAGG
AAGCTAGCAG AGGAATGCCC TCCAATAGAG ACTGCTGCCT GAAGCTCAGC CCTCTGAAG ATAGGTAGGC CAGGCTGGCT
TAGCTGAGGC AGTGGGTTAG ACCAGCCCT

SEQ ID NO:241: (Length of Sequence = 233 Nucleotides)

GTGACCGGT CTGCCCTCAT CTTTAATGG COGGTGGGT ACAGTTAGTG GACAGACGGG GGATGGGACA CAGCAGGGGT
GAAACAGGGC AGTCACAGCC GGGGCCGGG ATCTGGAAGC GGGGGCGGTC CTCCCCCTGG AAACACCGTN TCTGGAAGGA
CACCCTTAGG ATCCCCTGAC CTCARGGTGC CACCACACG GGCTGGTGT TCTGGGAGGC CCGGCTKGAG TGA

SEQ ID NO:242: (Length of Sequence = 372 Nucleotides)

ATATGTACTA CATTGGTGG AATACGCATG TACAATCTT CAAAATAGT AAAGAGCAA ACAACAAAA AATAGTAGAA
GCACTGGAGA AATACACTAT GGCATAAACT AGTTACGGGT GGGATGTAC ATGGACCATA TCTACACTCT GTGGCAACCT
TCTTACCTGA CTCCAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT
CCTAAGCATT TTATTTAGC TCAAAATATA AAAATATCA TCAGTTAGCC AAGCTTTTEN GATGAGAGAT CATAGCCTCC
TCTTTGATAG GGGGTTCTT GGGTTTCTT GATTTCAIT TTGAGATTT TT

SEQ ID NO:243: (Length of Sequence = 256 Nucleotides)

CTCACACATT CATACCCAAG GAAGAGGCAA ACACACTCAA GTCCAGAGTT CCCAGTGGTG CCGCCAGAC CTACTGTCCC
GGGGGTGTA TGGCTGTCCC TCGCTTCCC CAGAGCAGCC AGGACAGCCT GCACCGNCTN CCAGACTCTC GCAGGAAGGG
GAGCTCTGCC CTGGGGAGGA AACTNACAGG CTGGGAGACA AGACTCCCAT CCGAGGGACA TGCACAGCAG CAGCCACAGC
CCCGGGGACG GGGCAT

SEQ ID NO:244: (Length of Sequence = 220 Nucleotides)

CAAATGGCAG TTCTCGAGAA TCGACGAGGA ACTTAAATCT GGAATCAGGG TTTCAGTGG GTCTCGACT CCCACCACC
CGCCCTCCG NCTGTCTCGC CGCCAGNGT GACCTCCAGC CGAAGGAATC TTCTTGGAT GGGTGACCT TGCCAANAGG
TGTGGCACCT GGNAGACTAG GAGGCGCTC CANACTAAG GCGCTCANT GCGGTTCTT

SEQ ID NO:245: (Length of Sequence = 239 Nucleotides)

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GGGAGTTTTT AGATGCCAAT ACATTGCAGA TAACCATATT GGTTACATTA GGGGAATGAG CATGGGATAG GTGCTCCCA
GTTGGTAGGA TAGCATGAGG AGGTTTCAA AGTAACCSCT TTAAGGGTAA TGTCCAGTAT TTGCTAAGTA ACCAAGGT

SEQ ID NO:232: (Length of Sequence = 272 Nucleotides)

GGGGCTGCAG ACTGAGTTAT TTTATTTCCG TATTTCCAGT TTGAAGCTAC TATCATGGGC GTTTAGAGTT ATACAAATGA
CACTTACAAA AAATAAAGA CCAAGACACC CAGAGTGAGA TGCATGTTGG GGACGGGGGA GGCTGGCAGC AGGGGGGGCC
CGGCGGYTCA CCCAGGGCT CCCGGAGGGG CGACGCTGG CTTCATCCAC CCGGAGGCC CAGGGAGCAC CAATCACAGC
AGGGGCTCTG GCCCAGGTGT CGGCAGCCCA GG

SEQ ID NO:233: (Length of Sequence = 364 Nucleotides)

ATTTTACAGT TTTATTTTAA AATCATTTAC ACATATTCAT ACAAAGAAAA ATAAATTTCA GGATGGAATC CTGGGGACCA
TGGTAGTTTA AAAAAAAAAA TCTCTCTGAT CATTAGCTAC TAAAGACANG GCAAGAGGCT TAGCAGTCAT TTCTGGGGGT
TAGTGTATCT CCCCATGCAG GGGACAAC TGAGAATCC AAGCTGCTCC CTCATCTTCC TTGATCTAG ATGGGGGAAG
GGGATTTTCC AATGCTCTCC CTTAGAAACA TTCAAGAAG TACAGCAAAG GCTTATGGTA AACTGGGAAC CTATTTGCTA
GAAATCTGTC AAGATTGCAC TTTCTGAACC CAATTTTCTT ATAA

SEQ ID NO:234: (Length of Sequence = 217 Nucleotides)

GGCCAGGAGC CAGAGGGCCC CGGGGCCACC CTTGCCGGGG AAGTGTATGA CCAGAGTCCA GACAGTGTCC CAGAGAGGCC
GCGGCCCGCA GACCGGAGGC TCTGCTGCCC CTGCTGGGAC GCTTCGCCAC TCCAGGGAG GACGGCCTGC CCGTGGCTGC
AGGAGGCCAC GCGGCTCATC CAGGAGGAAT TTGCCTTGA TGGCTACCTG GACAATG

SEQ ID NO:235: (Length of Sequence = 221 Nucleotides)

AACITTAAG TTAGGATTTT AAAATATTTG TAACITGGCTA AATTTTAAAG TCGTGACAAA TAATTACTTA GGTTCAGAAA
TATACACACA CTACTCTTT AGCCAGTTTC TTCAAGGIN TTACTGTCCC ATCAGATATC TAGCCATTTK CCTTTGCAAA
TTACATACCT TCTTAAGAGT GTATTTTAA GATTATTACT TATGCTTTAT GATGATATAG T

SEQ ID NO:236: (Length of Sequence = 221 Nucleotides)

ATAAATGGGT TTCTCACTCC TTAGGGACAC GATTGGAAAC AATACATCCC ATGAACACAG GTGAATGTCC CTGGTTATCC
CTGAGCTGGG CAGTTTACA CAATCANTTT TNCCTGAGG CCAAAGTCTG TGGTTTGATC ATCTTAGCAG CTTCAGAAC
AGAAAGTAGG TTTACTTTGT CTCCAAANTC TNATCTCGG TGCTCAAAGA AGAATGACCT G

SEQ ID NO:237: (Length of Sequence = 251 Nucleotides)

GACATCTTTC TAAGATTCTC TGTGGGAAAA TGACTGTCAA TANAATGCGG GTTCTGGGC CATGCTCTT ACTTTCAATT
TTTGATTACA AATTTCTCTT GACGCACACA ATTATGTCTG CTAATCTCT TCTTCTAGA GAGAGAACT GTGCTCTTTC
AGTGTGCTG CCATAAGGG GTTTGGGAA TCGATTGTAA AAGTCCAGG TTCTAAATTA ACTAAATGTG TACAGAAATG
AACGTGTAAG T

SEQ ID NO:238: (Length of Sequence = 327 Nucleotides)

GTTCGTGGCT GTCACAATAA TGCTGTGATA ATGCTGTGGT TTCCAGCAG GGAGTGGA GCGGGAGGG GGCTGCAGCC
TGATGAGAGC CAGCTGAAGG AAGAGCTGCC TCTCCCTTCC TAAGCCCTT CCAAGGTCT GCCCACCGC CCAAAACAAA
GACCACTCCG AACAAAGTGA GGATGTGGAT GCTCTGCTG GGTCCGCTGT TCCGAGAGG GAAAGAAAG GTAGCTGCAC

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SEQ ID NO:226: (Length of Sequence = 440 Nucleotides)

GTGCCTTAAG GAGAGAGATT GTGTCTCTCC TCTCTCAGGG GTGATAACTC AGGAAGCCTC TGGGTGSSGA AGACCATCAG
 TTCTTTTGTC TTAGGTTTCT TTTCCTGTCC CTCTTCCATC CCCAAGATGT GACCCCATAA AAATTTTTC TGAGTTGGCC
 AGGCATGGTG GCTCAGGCT GTAATCCCA CACTTTGGGA GGCTGAGGCG GGCGGATCAC GAGGTCAGGA GTTCGAGACC
 AGCCTGACCA ACATGGTGAA AACCCCATCT CTACTAAGGA TACAAAAAT AGCCGGGTGT GTTGGCACAC ACCAGTAAGT
 CCCAGCTGCT CAGGAGGCTG AGGCAGGAGA TTTGCTTGAA CCTGGGAGGC AGAGGTTGCA AGTTAGGCCG GGATTGCGCC
 GTTTGTACTC CAGCCTGGGC AAGCAGAGCA AGACCATCTA

SEQ ID NO:227: (Length of Sequence = 426 Nucleotides)

GACCAAGAAG TTCCGGTTG AGGAGCCCGT GGTTCGCTT GACCTGGAGC ACCAGACAGN CCACCGGCAG TGGACTCAGC
 AGCACCTGGA TGCCGCTGAC CTGCGCATGT YTGCCATGGC CCCACACCG CCCAGGGTG AGGTTGAAGC CGACTGCATG
 GACGTCAATG TCCGGGGGCC TGATGGCTTC ACCCGCTCA TGATCGCCTC CTGCAGCGGG GGCGGCTGG AGACGGGCAA
 CAGCGAGGAA GAGGAGGAG CGCCGGCGCT CATCTCGAC TTCTCTACC AGGGCGGCAC TTGCCACAAC CAGACAGACC
 GCACGGGCGA GACCGCTTTG CACCTGGCCG CCGTTACTTA CGCTCTGATG CGCAAGGGC TCTTGAGGCC AGCGAAGATG
 CCAACATCAG GCAACATGGG CGAAC

SEQ ID NO:228: (Length of Sequence = 278 Nucleotides)

CAGGACCAGG AGAAGATCCT GGAAGATGCA GTGGATGAGT GGACGGGCTT TAACAACAAG GTTAAAAAGG CCACTGAGAT
 TGTTTTGAAG AACCAACAGC AAAACACTGA CAAGGTACAT AAATACAGAT TGGACATTTT AGGGTAAAT CACTGTATTT
 CCTACTTGCT TGTAGGAAAC CGAGTAAAGT GGAAAGCTG TCTGATCAT ATGGCATGCA CACCAGACTG CAAAAGGNGC
 TCCACACTAT TTAACAGGAC TGTGGCAAAA TAGCTTAA

SEQ ID NO:229: (Length of Sequence = 425 Nucleotides)

TTTTTGTTCC CAAGCCTTTG TGACTGACTT TAAATCCTCT CACCTGCAGA ACAGAGATGG CTTCAAAGTG GGGAGTGAGG
 GAGTGAGCGA GGACCTGGG CTGAGACCTG TTTTCTTCC ATTCTGCTG TGGCTTCCA CAGCTCCCTG GTTCCACACC
 AGGCCCTGCT CTGCGCAGA AAATGGATTC CCAGGCCACA GAGCTGTGAG GCTTTTGACT TTGCAGAGAC CAAGCACCCC
 AGAGGCTGTG CGACASGGCT AGTCCCTGGT GGGCCGGTCT GGGCATGGG GGGCAGGGAG ACTKGGAGAT GGGGAGGGCG
 TTGAGAATCC GGGGGTCTCT GGATACTTGA CAAATGGCT CAGGTCTTAG CTYTGGYTGC CCCACTGATT GTGTGCTTG
 GCAAGGTGCA AGTYTTCGGC TGTTT

SEQ ID NO:230: (Length of Sequence = 382 Nucleotides)

TTGGAGGATG TGCTGCCCCT CCTGCAGCAG GCGACGAGC TGACAGGGG TGATGAGCAA GGCAAGCGGG AGGGCTTCCA
 GCTGCTGCTC AACCAACAGC TGGTGTATGG AAGCCGGCAG GACTTTCTCT GGCGCTGGC CGAGGCTAC AGTGACATGT
 GTGAGCTCAC TGAGGAGGTG AGCCAGAAGA AGTCAATATG CCTAGATGGA AAAGAAGAAG CAGAGGCTGC TCTGGAGAAG
 GGGGATGAGA GTTCTGACTG TCACCTGTGG TATGCGGTGC TTTGTGGTCA GCTGGCTGAG CATGAGAGCA TCCAGAGGCG
 CATCCAGAGT KGCTTTAGCT TCAAAGGAGC ATKTGACAA AGCCATTCTCT CTTAGCCAG GA

SEQ ID NO:231: (Length of Sequence = 398 Nucleotides)

GAGGCTGGAG AATCGYTTGA ACCCAGGAG CGGAGGTTC AGTGAGCCGA GATGGCGCCA TTGACTTCCA GCCTGGGCCA
 GAGCAAGGTT CCTTCTCAA AAACCTGGAA ATCTGTGGG AAGTAGGGGG AGGGCAAGGT TAAACCTAT GCAGGTGTGT
 CAATTAGACT TGTTCCACT TGAGAACCTG AATTTTCAT GTAATTGAAA TGTTCAGAA CAAGTCTGGC AGTTTCAATA

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TTTTTGT TTTTAATAT TTTTGATATT CTCITTTGCAT TGAAATGGTA TAAATGAATC CATTTAAAAA GTGGTTAAGG
ATTTGTTTAG CTGGTGTGAT AATAATTTTT AAAGTTGCAC ATTGCCCAAG GCITTTTTTG TGIGTTTTTA TTGTTGTTTG
TACATTGAA AAATATTCTT TGAATAACCT TGCAGTACTA TATTTCAATT TCTTTATAAA TTAAAGTGCA TTTTAACTCA
TAAATGTACA CTATAATATA AGCCTAAGTT TTTATTCATA AGTITTTATG ANGITTCGAT CGGTCCOCTT CAGAAATCTT
TTTATATTAT CCTCAAGTT ACTTCTTAT TTATATTGTA TGTGCAITTT ATOCATTAAT GT

SEQ ID NO:221: (Length of Sequence = 314 Nucleotides)

GACTTTGGTT TATTTAAAA ACAAGCCAAA AAAAAA AAAAACCACA ACITTTATATA CAAAGTCAA CTGAAACCAC
GGWTTATGGA AAGAGGCAAG AWTTATGGGT AACAGGGGAG AAGGCTGGGC CAGAGCCAAT ACCACATTCT GAACACAGGA
GCCACGGGAA AGAGGTGCTG GTTCTTCTG GCAAGACCGG GGTGACTGGA ACGCAGTGGT CCTACTGGCA AACCCAGCCC
AACACTGAGC TCTTCTAGC ATGGACTCCA TTCCCGTGAT TGGCCAAGGG AGACCCCTCC CCCAGGAGGC CTGT

SEQ ID NO:222: (Length of Sequence = 342 Nucleotides)

TTCTTCTCT GCGGCGGCAC GTGCGNAGCA GCCTGCTTCG CCCCGTCTC AACTTTGAGC TGGAGGAGAA GCAACTTTGG
CAGTGGCCGC GGGTGGGAA TCCCGCTTCT CCTGGGCAGC AGTAGGCTCG CAAGTCGCTG GGGTTAGGTG GGGCAAGAGT
TTGCGCGGCG CATCAGCGCT TGCTTCGGAC TGTITGCAAC GTGTTTCCAG CGAGCTGGGA GCGGGGGTTG TGACTGCGAG
TGCTTGGGG GAGGGGACT TGTITTTCTT TTCTCTAGA GACCTCGCT TTCAACTGGA TCAAACGTTG TCGAAAGGAT
GTAAATAGGC AAGAGCAAAC TG

SEQ ID NO:223: (Length of Sequence = 376 Nucleotides)

GTGATGGCTG CCTTGAGGGG GACCATCATG TCGGAGACGC ATTTGGTGAG GTCTCACCCC ACAGCCCATG CCCAGCCTCC
TGCAGACTCA GGTATCCAG CTGGTCGATG GCTCTTTGCA TACCTGGTGC CTCTCTCTCT CGGGCTTGGC AGGCTTCTCT
GGGGCTTCT CAGATGACTC TTTTGCCITC TTCTCTGCT TGGCTAATC CTGGCCAGC TCTGAACGTG CCTCCTTGGC
TCCCTCTCT ACCACCTCCT CCCGTTTGGC CAACITGCTC ACGGCCGCT TGGTAGTGGC TTTGAGGCTC TCCTTGCTAT
CAGCCCGCTG TTTGATTTTG CTGGGCTTGA GGTGGTAAG GCACAGCCCC AAGAAG

SEQ ID NO:224: (Length of Sequence = 445 Nucleotides)

GTGATAGAC ATTTGGCAITG GGGTGTCTC CACCTTTTGG CTGTATGAA TAATATTGCT ATGAACACTA ATGTACAATT
CTTTGCCTGA ACGTAAATGT TTTCAATTCT CTGGGTATT TATCTAGAAA TGAAATTGCT GTATGTTAAC CCTTTGTTA
ACCTCTTGAG GAACTGGCAG ACTTTTCCAA AGCAGCTGCA CCATTTTAAA TTCTAACCAG CAGTGTTTGA GGGTTCCAAT
TTCTCTATAT CCTTGGTAAC ACTTGTATC TGCCCTTTTG GTTAGAGACA TCCTAGTGAG TGTGAAGTGG CATCTCACTG
TGGTTTIGAT GTGCATTTCC CTGATAGCTA ATTGTGTGGA TCCTTTTTC TTTTAGTGGA ATGAAATATC TGGTAGTCTC
GTATGCCAAA CTAAAGCTAA AATTAAAATG ACTCTGCATG ATGGA

SEQ ID NO:225: (Length of Sequence = 403 Nucleotides)

TGCTCTGGG ACAGTTTCCC GGGCAGCTCC TGGCCAGCTT CCAGCCGAGA GTCTCAAGT CCAGGGCACC TTGGGCCAG
CGCAGGAGA ATCCGAGGTG GTCCTGGCTC TACCTGGGC CTCTACTCC CCAGCACCCC TGGAGGAGGC AGGGGCTCCC
CGCCGCCGAG GCTGCCTGCC CTAGGCCAC CTCTGCATGC TGCTCATGG GCCACCTGC CTCTGGGCC CTCACTCTGC
CTAGGGGAGC TGGGCCAGGC ACTAGCCTTT GCCAGGGAG GTGGGCCTCA GGCTGCCAG GTGCCTGCAC CCCAGCCGGG
CTTCTCTGGG GCCTCCCGT CGTCAAGCCT ATATCTGTC TGTCCCCACC CCAGCTGTCC CTTGCCAGGG GACTGGCATA
AAA

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CAGTTTTGGT GGAAGAGGGG GGCCCTAGAA ACCCTGTAGC GCAATGGGGT TGGGCGCCCC AAAGGTTAAG TTTGAACCCG
AAGAGCAAAG GAAGAGGCCA TCATCATAAG TGGAGGATTA GGATTAGGAT

SEQ ID NO:213: (Length of Sequence = 302 Nucleotides)

ATCTGTGGAA TAATCTGGG GCTAACACGG ATAACTCAGT ATAAGAACCA CCCAGTTGAT GTCTATTGTG GCTTTTTAAT
AGGAGGAGGA ATTGCACTGT ACTTGGGCTT GTATGCTGTG GGAATTTCC TGCCANTGA TGAGAGTATG TTTGAGCACA
GAGAGCCCT CAGGTCTCTT GACAGACCTC AATCAAGATC CCAACCGACT TTTTATCTGC TAAAAATGGG TAGCAGCAGT
GTATGGGAAT TTCTCATAC AGAAGGGCAT CCTCAAACC GGAAACCACA GAGATGCTAG GT

SEQ ID NO:214: (Length of Sequence = 354 Nucleotides)

ATGGATGAGT GGGCACCCCG CACAGGGCTG CAGGGTGGAA AACGCTGAC GGCCAGGTGG TGACTTGGGG GCAGAGAGCG
CAGTGTGTA GGGGAGGAGA GGTGGTGTCC CTGCTGCTG GGAGCCAGCC TGCTGTNCT GTGGGCAGAG CAAGGCACTT
TCTGCTGCC GTGCTTCAG GGCCTAAGCA GCGCTGCAC ACTCACCAGC GCAAGGCTCC TCTGCAGGA ACGAGGGCTG
CTACCCATT CACAGATGAG GGCAAGCAAG GACTTGCCCA GGGTTCGCCA NAGCAAGTGC GTAAACAGGC CTGAGAAGAG
NGCCAGTGAG CTCATCTGA GTTAATTATG GGCT

SEQ ID NO:215: (Length of Sequence = 260 Nucleotides)

TGGTTCAAAG TCTAGGCCCT CTNAGAGCT GGCTGATTCA GCTTGCCAAC AGTGACATCA GGGTGAGGCT TCCTCTGTCC
ACAGCATAG CTGGAATAT CCTCATGGTC ACAAGATGGC TGCCAGTGGC CGTCAGGGTG TGTGCTTCTT GTTCACATC
CAGTGAAGA GTGACAGCCT GCTCCCTTA GCTCTGTGAC ACCANTGTGA AGGTGCCANG AACTTACTAG CAGGCTTTTC
CTCATGACC ATTCAACAGG

SEQ ID NO:216: (Length of Sequence = 232 Nucleotides)

CTTGACAAG ATCTGGGATA ATTCTCTGGA TTACCTGGCA GAGACTTTTK TTCTCTTCCC TTACTGTCTC CCAATAAAC
AGTCTCTCAC TCTGTTGIGA GCCACCTGAA GCTGTGATAT TTCCAAGAC TGTAGGAGGA AAAAATTAG GGGAGAGAGG
AAAACAAAC CAACCAACCC CTAANATCAT TTTTATTATG TACATAACGA CCTCATTCTC CTGTATATGC GG

SEQ ID NO:218: (Length of Sequence = 219 Nucleotides)

CTGCAACCAT CCATACCTTT TNCCTGGC TGCTATGGAG TCCCCAAC TCCCCAGTGG GGCATTAGAG GGTGGGGCAC
TTATTANGIN GTCTGGGAAG CTCATGCTG TCCAGAAGAT GCTGCGAAGC TGAAAGGAGC AAGGACACCG AGTGCTCAAT
NTTCTGCGAG ATGACCAANA TGTAGCCTT GCTTGAGGGC TTTCTTAGNC TATGAGGCT

SEQ ID NO:219: (Length of Sequence = 390 Nucleotides)

GATAGGTAGC AGAGACCAAG GGCAGGGTG CTTGAGATGA GCAAGAGAAC CCAATCGAAC CAGATACCCC AGGTGGGCCG
GAGGGACCCC AGACCTTCAG AGGGCTGCCC TGGTGTCTC CACAGTGCAG TCCCTCTGTA TTCCAGAGT GGGATGGGG
CTTTCAGCCC ACCCTGATGC CTGCCCTCCA GGATGGCTGG TTTAGTCTGG GTCCATGTCC CAGACCCCTC TATCTGTCTC
CAGGACAGCA GGACTTCAGG TCTTCCCTGG GGGTGGATAT AGGAGAAAAT TTTGCTCTGG CACACACCTG GGCTCCAACC
ACTTGCCAAG TGATTCACTC TTAGGCCGAG GGGGAACACA ATGACTATCA TTACTGATGC AGACCTGGCT

SEQ ID NO:220: (Length of Sequence = 382 Nucleotides)

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CTTTACTGTG GGTGTGGGTG TCACTGTAC TGCCACAGCC ACTNGGAGG ACACACAGCT TTAACCCCTR TTTGCTTAGG
NGAAGGGTGG GGGCATTGAG GGTATAAAA CTAATATAT ACACAGAAGG TOCTAGGKAG AAAGCCACCC TGAGCACACA
TGCTAGGCA CA

SEQ ID NO:207: (Length of Sequence = 215 Nucleotides)

AAGGCAATTA GAAGATTAT TGAATATTGG TTAAAGTAG ATTGACAATG ACATTAAAGA ATAAAGTGTA ATTTATTTGG
TGCTACTTTG TGAATGCTTC CAAGTACAAA TCATCTCACA ATACCATATA CAACATACTT TCAATCACA CTCAAATATA
AAATAACCTA CAAATCACA TTGCTATAAT CAATATACAA TAATGTATT TTAA

SEQ ID NO:208: (Length of Sequence = 444 Nucleotides)

GGAGTTCTCT TGTCACGGA GAGCAGTGT GACGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
AGTCTGACGT TGATGTCCAG CTCACAACA GACACATGAT GATCCGAGGA GAAACATGT CCAAATCCT AAAAGCACGA
TCCATGGTCA CCAGTGCTT TAGAGATCAC TTCTTTGATA GGGGGTACTA TGAAGTTACT CCTCCACAT TAGTGCAAAC
ACAAGTAGAA GGTGGGTGCC ACACCTTCA AGCTTTGACT ATTTTGGGGG AAGAGGCATT TTGACTCAAT CCTCTCAGTT
GTACTTGAGA CCTTCTCCC AGCCTGGGAG ATGTTTTTTG TATT

SEQ ID NO:209: (Length of Sequence = 338 Nucleotides)

GCAGATCACT TGAGGTGAG AGTTGAGAT CAGCTATAT ATGCAAGTAC ACACACAGGC ACTCGCAGC ATGCATGCTC
ATGCAACACA CATGTACCT CTACATGTAC AGCTCACATA TGCTCCATA CACATGTGCA TGCTACCCA TACACCAGCC
ACACACAAGT ACTCATAGC ATACATGGCC ACACACAAAG TACACACAG TACACCATAT GCATATGTAT GCACTCATAC
ACTCATACAT ATGTGCCCCC TCAGAGAAGT ACACAAGTGC ATGCGCATCA CACATGCATA CGTGCTCATG CATACACAG
GGACATTTCA TACACAG

SEQ ID NO:210: (Length of Sequence = 371 Nucleotides)

GAGGAAGTAG AGCCINAGGA GGCTGAAGAA GGCATCTCTG AGCAACCTTG CCCAGCTTGA CACAGAGGTG GTGGAAGACT
CCTTGAGGCA AGCGTAAAG TCAGCATGCT GCAAGGGGAC TGTAGATTTA ATGATGCGTT TTCAAGGGTA CACACCAAAA
CAATATGTCA ACTTCCCTTT GGCCTGCAGT TTGTACAAA TCCTTAATTT TTCTGAATG AGCAAGCTTC TCTTAAAGA
TGCTCTCTAG TCATTTTGGG TCTCATGGCA GTAAGCCTCA TGTATACTA AGGGGGAGTC TTCCAGGTGT GACAATCAGG
TTATTTGAAA AACAAAACGT GGTTTTGGGA TCTGTTTGGG AGACTGGGGA T

SEQ ID NO:211: (Length of Sequence = 295 Nucleotides)

CCTCCCAACG TGTGACATT ACAGGCGTGA GCACAGCAC CCAGCCCATC TAGCATAATG TTTTGCAATG TTGTCAGCAG
ATAAATATTG AATGACAAA CTCAGATGGA GAAAAAGAA CAAATAACC TAGTTCTCAG AAAGATTAA TGAGCAAATG
GAAAAATGTC AAAAAGATTT ACAGACAGGG GCATCTAGA GTCCTGGAA TCACACAGGC CTTCCTCAG CTTGAGGGGG
TGCTTGAGG TGGGGGTGGG GTTACACCTC CTCAGTGGG AGAGACTTGC CAAAT

SEQ ID NO:212: (Length of Sequence = 370 Nucleotides)

TGGCGATAT GAGGGGGGTG GGAAGTGGCC CCGCGCTGCC CCCGCCCT CCTATGTCA TTCTCGAGGA GGGGGGGATC
CGCGCACT TCAGCTCGG TGCTGAGTGT CCGGCTGGG ATTTACCAT CGAGTCGGG TATGGGGAGG CGCCCCGCC
ACGGAGAGCC TGAAGCACT CCCACTCCT GAGGCTCGG GGGGGAGCCT GGAAATCGAT TTTCAGTTG TACAGTCAG

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AAAGGTGGTG AAAGCCCTGC TTCTGGACAG TCCGGCTCCA ATCTGTATAC TGTTTGTCTG GGATGCTGTA CTCAAATACC
 TGCTGGTCCG AATGAGOGAT GACAAGGTTG TTGTGTATTG GGGGCAATAG CCRATAGCAGT CACTTGGGAA ATTGTAAGCA
 GGCACCGTGC AGTGAAGTTT TA

SEQ ID NO:201: (Length of Sequence = 273 Nucleotides)

ACTCCACGCT GATGAACCCG ACGTCCATTT CTCGAAGAAA TTCCTGAACG TCCTCATGAG TGGCCGCTCC CGCTCCTCCA
 GTGCTGAGTC CTTCGGGCTG TTCTCCTGCA TCATCAACGG GGAGGAGCAG GAGCAGACCC ACOGGGCCAT ATTCAGGTTT
 GTGCCTOGAC ACGAAGACGA ACTTTGAGCT GGAAGTGGAT GACCTCTGTC TAGTGGAGTC CAGGCCCCCA GACTACTTGT
 TACGAGGGCT ACAACATGTG CACTGGGTGC CCG

SEQ ID NO:202: (Length of Sequence = 436 Nucleotides)

GGACTCCAAC CCCCCAGGAG GCGAATGCT GAGCTTGGCA ATGGTGGCCT GGATGGAGCT GATGGGCACA TCCCCACCGA
 GGACCAGGTC CTGGGAGTCC TGAGGAAGGT GGTTCCTCTG GCTGATGCTT GCCTTGGCCA AGGGTTTGCA TGGAGGAGGC
 ACACCATGGC GCTGCAGGAC CTGCTCCACG TGTCTACCA CTGCCCTATA GCAGAACCIG AGGTGCAGCT TCCTCTGCAG
 CATGTGCTTT CTCTGCTGCC GCATGCGCCG CACCAGCTGA GGCAGCTCAG GGATTCCKTT CCCAGCCTCC ACCTCTGCA
 CAGCTGCATA GAGCAGTGCA AAGGCTCCCG TGCGGCCAC ACCAGAGCTG CAGTGCACAA TGATGGGCGT TTGCAGGGGC
 CGTGATGCAA GGTAATTTGC GTGCACCTCC TGGGTT

SEQ ID NO:203: (Length of Sequence = 336 Nucleotides)

CTGCATGTTT TGGGACACT TACGCCAAGG CGCCGCTTC TCATTAGGAG CTGGGACCAG AAGTGAATAA GCCAGGTTCC
 TGTCTCAGGG AGCTCCATAG CAGGACTCAG AACCACACAC GGCCCTCTAG GCATTTKTA AGCTCTGTGC TTCATTTTTT
 TTGCTTTGCC TCTAGTTTTC CCTTTGCAGT ACCAATGCAG CCAGCCCATG TKTCCCTCT ATGTGGAATG TTAACGATAT
 TCCACTGTT TCTGGTGTCC TTCTGTAAAT CAGAGCTGCC GTGACCATTC CAGTTCAGGC ATCTGGTGG CCTGGCTTTC
 TCTGGGGCAT AGAGCT

SEQ ID NO:204: (Length of Sequence = 393 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCCCCA ACCCCCATCG TCACTCTGCT
 GCAACACGAC ACAAGGTTT AAAGATCTGG GCCCAAGAC TCTGGGTCCC TTCAAGCAAG CTCAGGTGGA AGGAGGTTTC
 CCCACCCCC ACCAGGCTCG TTGCCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG AAGCTGATAG
 GAAGAACTNC GATATCAATG GCGTAAGCCT GCTGTNTGCC CAAGGGAGCC AAGGGCAAGA GCCAAAGGGC CAATTTAAAG
 GACGTGGACC TGGGGGGCCA GAGGAGGCAC CACAGCGAG GGGAGCCACG CCTGGGCGG GCAGGGCACA TGG

SEQ ID NO:205: (Length of Sequence = 390 Nucleotides)

GAGGAAGAGG ATGACCTGAG TGAGCTGCCA CGCTGGAGG ACATGGGACA ACCCCCGGCG GAGGAGGCTG AGCAGCCTGG
 GGCCCTGGCC CGAGAGTTCC TTGCTGCCAT GGAGCCGAG CCGCCCCAG CCCCGGCCG AGAAGAGTGG CTGGACATTC
 TGGGGAACGG GCTGTGAGG AAGAAGACG TGGTCCAGG GCGCCAGGT TCAGCCGCC CGGTCAAGGG CCAGGTGGTC
 ACCGTACATC TNCAGACGTC GCTGGAGAAT GGCACACGG TGCAGGAGGA GCGGAGCTG GTGTTCACTC TGGGTGACTG
 TNACGTATC CAGGCCCTGG TTCTCAGTGT CCCACTCATG GACGTNGGGG AGACGGCCAT GGTCACTTCT

SEQ ID NO:206: (Length of Sequence = 172 Nucleotides)

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SEQ ID NO:193: (Length of Sequence = 397 Nucleotides)

GAAAAGACCA AGGAGATGGT GAAGACAGCA GAAGCCCAGA AGCAGCAACT GAAGGAGGAG CAGGGGAGGT CAGCAAGGAA
 CGGGAGAGTG GGGATGGAGA GGCTGAGGGA GACCAGAGNA CTGGAGGGTA CTATTTAGAA GAGGACACCC TCTCTGAAGG
 TTCAGGTGTA GCGTCCCTGG AGGTTGACTG TGCCAAAGAG GGCAATCCTC ACTCTTCTGA GATGGAAGAG GTAGCCCCAC
 AGCCACCTCA GCCAGAGGAG ATGGAGCCTG AGGGGCAGCC CAGTCCAGAC GGCTGTCTAT GCOOCTKTTC TCTTGGCCTG
 GGTTCGGGTG GGGCATGCGT CTAGCTTTCA CTCGTGTTCA GGTCCAACAG GTCCGTTCT GTGCCTTTGG TGCCCCC

SEQ ID NO:194: (Length of Sequence = 225 Nucleotides)

GATTATGGC TTGTCTTTCA TAACATGIAT TTTTAAGTAT TTAATCTCTT AATGGCCCTC GTGTCTATTT TATACATCAT
 ATCTCTTAAT TCTCTAGATG GAACACTGAA GGACAGGAAT TAAGTAAGTG ACTGGCCATG CAAGGGTTGG AAATTTTACT
 GTATCCCTTC CTCRGTAGAA GTTATGTTAA ACATTCAAGC AACCACATAT CTAACAGAGG AGTTT

SEQ ID NO:195: (Length of Sequence = 294 Nucleotides)

ATTACTAGAT ATTTGTATGT TAAATTATGT GGGTTTTCAA ATTTGTGGAG AATAAGTAAT AGTGACATTA GTTTAAGGAC
 AGTGTTCAT CAGGGCATTG TTTTAATGAA TCTTATATTT AAATGCTCTG TTCAGGAATT CATGTGAATC TTCTTTTTTA
 TAGAGGACCC ACAGGCATGA NTTATTTACT CCTCGGTGA TAGGTTCTCA CCTGTATGAA AGCGGAAGCA AATTCCAGGT
 TAGAACATTA TNCIAGTTAT GTAGGGGGT ATAAAGTGTG TAAGTTTAAT ATTT

SEQ ID NO:196: (Length of Sequence = 233 Nucleotides)

TTATTTTCT CTAAATTTTA AAATAGAAGA CTTTAATGGA AAACATTTAG TACCATCATG TCAMCCTGAA TGCCAGCAAT
 ACCTCGACTT TTACACACGC AGGAAGCCTA GTAAAGCCC CGTCAGTAGT ACACATTTCT CTATGGTCCT TCAACAGTTT
 TTCATATACA AAATTTTCTG CTATTTTTCG TTTTGCAAAC AGCAATAACT TTTGGGTTTC CCATATGACC ACC

SEQ ID NO:197: (Length of Sequence = 230 Nucleotides)

AAGATATCTA CCTGGAGTAG CTGTGCAGCC CCGOCTCTG CTTCOCCOAG CCTCAGGCC AGTGCCAGGA CAGCTGGCTG
 CTGACAGGAT GTGGCACTGC TTGAGGAGGG GCACCTGCCA CCGCCAGAGG ACAAGGAAGT GGGGGCCGCT GGCCAGGGTA
 GGGAAAGKTG GGGCAATGGG GAGAGGCAAA TGCAGTTTAT TGTAATATAT GGAATTAGAT TCATCTATGG

SEQ ID NO:198: (Length of Sequence = 118 Nucleotides)

TTCTCCGGG GAAAGGCTG TTGCTGAAGT GGCCGGTTTT TTTAAGCATC GACATTTGCA TCCAAAGGTT CAAGCAGCCG
 CCTCAGGTT CARAGGCTC CACCTGATGG CTGCATT

SEQ ID NO:199: (Length of Sequence = 268 Nucleotides)

TAAATGATGG AGTTAAATGA TGTTGTCAGT GCCTATTAA AAACTACTC TTCCCTTCT CTATGAGTTC TACTTTGGTA
 AATATTAAATA TTAAACAGT TAGTAAACT AACACCACTA TTTCAATTCT CTTTGTGCA TAGTAAGTAA ATTTTGCTTT
 ACTTACTTTA TAAAAAATA CTTTACATTT TATAAGCAG GTTTTAGAAA AACGGTTTAC AAGAAAGTTT GCCTCCATTT
 CACTGCCAAT TTAAGCACAG GGGAAAT

SEQ ID NO:200: (Length of Sequence = 422 Nucleotides)

CCAGTGAGTT TGTGAAAGC AACAGGGGTA NGACAGGTT CAGGAAGGAC ACAGACAGTG CCTGTTTTA GGTTCAAAT
 TTCTTCTTTT TAATGGGTGG TGGAGCTGA GCAATGATGT CATTGGAAG GGGCAATGAC TTGTCAATNA TGCAGAACAT
 GTAGGCATCA TGGAGAAGGA TGTGCATCGG TCTCTTGGGA TGAAACTGA TGTGTGTGAT AGGAGTATCC CTTTGGAGCC

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TCAGCAGAAG GCTCTTGGGC GTGTGAGGGA GGGTCTTGA GAACTAAGCG AAGGAGGCAA ACGCCAGGGC
CCCTTCAGGCACC ATGTGCACCA CTT

SEQ ID NO:186: (Length of Sequence = 343 Nucleotides)

GTTOCAATAG CTGGTTTTAT TCTCAGCACA AAAGGGCCCT GTGTAAAAAC CAGAAGGATT TTGTAAAATA TCAAAATGAA
TATTGGCCCT GGAGGTTGGA AAGTGAAGCA AGGCTGGACA TAGAAAAAAA CTGATCAGTA GTTATTCAGG ATATTATTTA
GGATAAATGA AATAGGAACT TAGGGGCATC TCTTACTTTT CTACAGGTTT TTATCTGGGT CAATGAAGAA ATTGTGTTTA
TCTTGCTGCC CTTCATCAG GTTTTTTGCA CTAATGGAAA AAAGCCGGCC GAAAAACAAA ACCCAATCCT TTCAGTCCTA
GCITTTACAT CTTGCCCTTG CAA

SEQ ID NO:187: (Length of Sequence = 229 Nucleotides)

GGTGGGGCTC CACCCCTTCC ACGTCATCCG CATCAACAG ATGTTGTCTT GTGCTGGGGC TGACAGGCTN CAAACAGGCA
TGCGAGGTGC CTTTGGAAG CCCAGGGCA CTGTGGCCAG GGTTCACATT GGCCAAGTGA TCATGTCCAT CGCCACCAAG
CTGCAGAACA AGGAGCATGT GATTGAGGCC CTGCGCAGG CCAAGTTCAA GTTCTCTGGC CGCCAGAAG

SEQ ID NO:188: (Length of Sequence = 284 Nucleotides)

CCAGCAACTC AAATTACCA CCTCGGACTC CTGCGACCGC ATCAAAGACG AATTTAGCT ACTGCAAGCT CAGTACCACA
GCCTCAAGCT CGAWTGTINAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CTTCACTATK TGATGTACTA CGAGAGTCC
TACGGCTTGA CCATCGAGAT GCACAAACAG GCTGAGACCG TCAAAGGCT GACGGGATTT GTGCCAGGT CTTGCCCTAC
CTTTCCCAAG GAGCAACCAGC AGCAGGTTTT TGGGGGCCAT TGAG

SEQ ID NO:189: (Length of Sequence = 215 Nucleotides)

GGAAGGATGA GAAACAGATT TCTGCTCACT TCATGGGCTG RCCTRGRATT GACGATGGTR CAAACCAAG ATTATCCTCA
TGTAATTTAT GAAGATTATG GAACTGCAGC GCATGACATC GGGGACACCA CGAACAGAAG TAATGCAATC CCTTCCACAG
ACGTCACCTGA TACAACCGGT CGGGCACATC TCKGGGCTTA TGCTGCGGT GGTGC

SEQ ID NO:190: (Length of Sequence = 153 Nucleotides)

TTTCATATGG AAAGAGCTAG TACAATCACA TATTTGAAAG GAGAAACAAT AGGTACTGAA CCGGAGGGAA AGGGCGAGGG
TGAGTGTGCC AGCACCGGCC TGGTGAATCC ACGATTCCGT TTCCCATCCA AGGTAAGTT TCCCAAAATA CCG

SEQ ID NO:191: (Length of Sequence = 316 Nucleotides)

GTATTTATAC ATTATTTTAT ATATGTATAT TTAATTGAGA NGAAACGAAC ATTTGCGGGA CAGGAAGCAA GCAGGCCCGG
GGCTGCTTCC CTCCTGCCC ACCTCAGAGT CAGAGTTGGC ACATGACAAA TACCAAGCTC AGGGTGAAGA ACTGGGAGTT
AACTGGGAAG TAGGGKGGC TCTATGCACA CGCAGGCTTC TAAGGGTGCA CGGTATGGGC AGKKGTTTG CACTGGGAGG
CCCTATGTAC AGCITGAAAG CTAGGGGTGA GATTAGCCCA GTGACTACAG GAACATACGT CAAAGTTGAG AGAAGA

SEQ ID NO:192: (Length of Sequence = 360 Nucleotides)

GIGGTTTTTG GTTATATGCA GCTTTTACT AGCATGTATT GTGTCTTTT CTCTCTATG AATAATTTTA TATTTATGC
TACTTCTTGA AAGTTTACTC TTTGATGCTC TAAGAGAACA GCCAGATGGT TTATATGAAT AANCTTTATC TGCAGGATGG
TGGATTGGTA AATNAGGAGA ATGTGTGTTG AGATATCAAG ATTTATGICT GGGAACTAAA ATATATAATG CCAAATGTGT
TTTTGTCAAT TACTAGAGAA TTCTGTGCAA ACATATCATC TCTTCATG CTGCACACTT TGCTTTTGT TAAACAGCAG
GTAGTAGACA GACCAATACC AGTTTCGGT TAAGG

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TGGGGGACCA GCATTGCTCC CAGCTGAGGG CGCGTCTTC CTCACCACT ACCGGTTCAT CTTACGGGG ATGCCCCAGG
 ACCCCTGGT TGGGGAGCAG GTGGTGGTCC GTCCTTCCC GGTGGCTGG CTGACCAAG AGAAGCGCAT CAMCKTCCAG
 ACCCCTGTGG ACCAGCTCTT GCAGGACGG CTCAGCTGC GTCCTGCAC ATTCCAGCTG CTGAAAATGG CCTTTGACGA
 GGAGGTGGGG TCTTACAGCG CCGAGCTCTT TCCGTAAGCA GCTGCATAAG CTGCGGTAC CCGCCGGACA ATCATGGCCA
 ACTTT

SEQ ID NO:180: (Length of Sequence = 213 Nucleotides)

GAGCATGCC CCGGAGTCCC CAAGATCCTG GTGGGGAACC GCCTGCACCT GCGTTCAAG CGGCAGGTGC CCACGGAGCA
 GGCCAGGCC TACGCCGAGC GCCTGNCGT GACCTTTTTT TAGGTGAGC CTCCTTGCAA TTCAACATC ACAGAGTCTG
 TCACGGAGCT GGCCAGGTTC GTNCTGCTGC GGCATGGGAT GGACCGGCTC TTG

SEQ ID NO:181: (Length of Sequence = 219 Nucleotides)

AGCTTTATCA CATTATACAC AAACATAGAA AACAGTGTTC CAGAAGAGAA GCAAAGGCCA TTGGCTTCAA ATATTTATGC
 AACATGAAA ATGTCTCAG CCTTAAATG AGCACTGTG ACTGTGCAA CAGTGAGATA ACTAGTCAAT GGAAGAGTTC
 AACACTAGAG CATGTATCTC AGTCTGTCT CATATTGCTA TAAAGGGCTS CCTCAGACT

SEQ ID NO:182: (Length of Sequence = 451 Nucleotides)

GTCTTACTCT GTTACCCAGG CTGGAATGCA GTGGTGTGAT CATAGCTCAT TGCAACCTCT GCGCTCTAGG CTCAGTGTAT
 CCTCCACCT CAGCCTCCCG AGTAGCTGGG ACTACACGTA CATGCCACCA TGCCAGCTA ATTTTGTAT TTTTGGTAGA
 GACGGGGTTT TGCCATGTTG ACTAGGCTGG TCTTGAATC GTGAGCTCAA GTGATCTGCC TGCTCGGCC TCCAAAGTG
 CTGGGATTAC AAGCGTAGT CATGGTGCCT GGCTAGTTT GCTCTTATTT TTTTCCATC TTGTCAGTTT CTAGGCCACT
 GGGAACAGGC TGCAGAGCTC AGAGTCCACA GCTGTGAGGC TCCATGTTC ACCATCAAAA AATAAGGTGA CGAGAGTCTT
 GGGTTTCCCA GTGTACGGC AAGAGGGGT ACTGCTCAG GGTACACACA G

SEQ ID NO:183: (Length of Sequence = 444 Nucleotides)

CCAAGTTGAC CCGCGAACC ACCGAC-GGA AGAGTGAGT CCTGAAAAC CTGAAGGATG ACCGGAATGG AGACTTCTCA
 GAGAATAGAG ACTGTGACAA GCTGGAAGAT TTGGAGGACA ACAGCACACC TGAACCAAAG GAAATGGGG AGGAAGGCTG
 TCATCAAAAT GGTCTTCCCC TCCCTGTAGT GGAAGAAGGG GAGGTCTCT CACTCTCT AGAAGCAGAG CACAGGTTAT
 TGAAGCTAT GGGTTGGCAG GAATATCCTG AAAATGATGA GAATTCCTT CCGCTCACAG AGGATGAGCT CAAAGAGTTC
 CACATGAAGA CAGAGCAGCT GAGAAGAAAT GGCTTTGGGA AGAATGGCTT CTTCAGAGC CGCAGTTCCA GTCTGTCTC
 CCTTGGAGA GCACTTGCAA GCAGAGTTTG AGGTCAGCA CCGA

SEQ ID NO:184: (Length of Sequence = 399 Nucleotides)

GGCAGAAAGA GGAAGGAGAC AGTGCCAGGA GGAAGAAGGA AGGAGTCCCT TAGCTCTCT CATGTCCCC TTTACTTCTT
 GCTATCTCT TCTCTCTTC TTCTCTCT TGCCINTATG CTTGTATTT TGGCAATATG ACAGGCTGCT CTACCCAAGA
 TCAGAACTCC AAAACCACTC CCACCCCTGA AGGTGGGGAG GGTCTTAGCA GCGCTGGGTG GCTGCTGTG CTCAGGTCTT
 CAGCTCCATG GGAATAAAA ATGGCACCTT GAATCTCTAG GATTTGTCA CTTTGGAGTC ACAGCAAAGT TCTCTCTCT
 TTGTCCCCC GTTGTCTGCT CCTTGGGTTA TAGGACATGG TAAATATTTA TTACTTTCAG GGAACCAAGT TTTTATTAG

SEQ ID NO:185: (Length of Sequence = 263 Nucleotides)

CAGAGACACT GGCCAGCTA TTTTCAGCAG GGACAGAGTC GAGGCTCACT GGGGATGGCT TCAGAGGACA CTGAGGCCCC
 TCTCAGGGAG GGCAAGGCAC AGATACCCCA AATTCCACCC CACGTCCCA AGGTCTCCCA GCGGGGCTGT CCAGTCCATG

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GAAACTTATA GTCTTGCTC CCAACCTTCT GAACACTCCA GTAGAAAAAT CTCTCGCCT ACCTTTATCA CCCCACGACC
TACTAGCATT TCTTACTCTC AAAAAAATC TTTTCTGAAA AATCAAGACA GAGTGCAAAC AATCAGCATA ATTTTATTAT
GACARAACCT TTAATTTTAA TCCCCCTCTC TGAGAGTCT GCTAGGACTC CTTCAGATAA GTGAAAAAGA AAKTTTTTAA
AATTTATTCT CAAATCOGAA TTCCAATCTG TATAAAAAGG GCGATTCTCC CTC

SEQ ID NO:173: (Length of Sequence = 282 Nucleotides)

GCTTGGTCCC GTTCCTCAGG AAAAGGATGG ACCTTCTCTT CTCTCAGAT GGTCCTTCC ATTCCCCTGA AACCTGCATG
AGAGCTCTTA ACATGTTTCT CCAATGCAAT CAAGCCTAGA CTCCAATGT CCTCCAGCT CACCTCCATC TATGCATCTC
ATCTCTGGAT TTGGTGATCA GACTCTATAT TGACAGTAGG ATCTCAAACC CTGCATCCAT CCTTCTCCA GCAAGCCCTG
CTAGCCACAT GAGGAACAAG TTCCGGTCTC TTCATGACTT CC

SEQ ID NO:174: (Length of Sequence = 353 Nucleotides)

CAAGAGGTGG GAGAGGTAGG GGGCAACTAC AGCTCCCCAC CAGCCCCACC AGGGGGAATG GACCCCTCCC TGCTCTCTGC
CCAAGTGGCT CCCCCTGTAT TATGGGGGGG ACTTTGTGCA AACTCTGCCC CGAGGGGGTG GGGAGGGTGG AGGGTGAGTG
TGAAATGGCA GCGTTGGGG CTGGCAGCTG TGCTACTGGG CACTGGGGGG CTGTAGGGC TCCAGGAGGA GGGCCGAGAA
GGTGTGACC TTGTCTGCC CCGCACCTC ATGGGGTAAC AGCGGCAMIT TCACGATGTG GAAGTCTTC ATACAGGTCC
TCCAATCTGG TCCAGATACT TGGCCTGGST TCT

SEQ ID NO:175: (Length of Sequence = 394 Nucleotides)

GCCCATGCCC TTGTGTACAT AATCTCTAAT ATTTATATAT ATGATATAG AATCTCTCT ATAATATATG TCATAGAATC
TCTCTGGGC CTGGCGTGG AATGTGACAT TAAGAAAACA TGCTAAGACT GGCCAGAAAA ATGGATATTT CCCAGACCTG
GAGGATGGTG TTGTGGTATG ATAGGTGAGG TCGTGGAGAA GATAATAAAC TCATTCCCCA AGATACCCCTC TTCAACACAA
GGACAAGAAG GAAGGTGTGT GGTGGGGGAG GGGACAATGG AGGGGGAGGA GTGGAAGATT TGGATTTTCA TTTAATAAAG
TCAATTGAAA AATGAAAGTG CACCCCCCT CCAAAAACA GGAGATTCAT TTAGCAAGAG CGTTTTCATT CACA

SEQ ID NO:177: (Length of Sequence = 381 Nucleotides)

ATTGGGACGG GCCCCCTCT GAGGOGACGG ATCGATAAGC TGATATCGA ATTCCCTGAT NTTTCTAGT GFTATGGTTT
TCTCCACTC CAATAACTWT TCATACCTKT GGTCTKAGTT TTCCATCTA TAAATCATG TGCTAAATAA TTAATATCA
TCTCTATCAT TGTGAGACTA CACAAAGCTT CCAGCCTGGG CAACAGGAAC CCTGTCTCTA AAAAAAATAC AAACATTAGC
CAGGTGTGGT GGTATGQCC TGTATTCCA GCTACTTGGG AGGCTGAGGT GGTAGGACTA CTGGGCTTT AGAGGTCAAG
GCTGCAAGTG AGCTGTGATT GGGCCACTGC ACTCCAGCCT GGGCAACAGG GCAAGACCT G

SEQ ID NO:178: (Length of Sequence = 443 Nucleotides)

GATTTTATTC AAACACAGGC AAGAACAATG ACCTTCAGAG CTGGGTAAAA ATAATAAGTT AAAAGCATGG TTAGAATTTT
AGACAATCAG ATAAAAAGTT TGAAGGAAGT GATTTCCCTT TCCTCTCTA ATTGATTAAT TCAACACAGC ATAAAAATAA
TTTGTATCTA TAAATATCC TTGTTCCAC ACAATGAAC TGGAGGTGGC CTTAGGATTT CCTTGACTAT GCACAATGCA
CACAACTAC ATGTCCCTCC TCCCCAATT TTAAGGCAAA AATGGTCTG CATCTTCAGG CAGAGGGTGG GCTCATGCCA
GCAGTCAGCT GTGGTCAAGG ACACTGGGG TGCGTTTCT CCACCGAAG ATGCTGCTT TGGGTCCACT TTGGGCGCGG
GATCCCATTT TATTTTCTAG CCTGTGCTC ACCACAGGGA AAA

SEQ ID NO:179: (Length of Sequence = 325 Nucleotides)

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GAAAACTTTG CCATGGGTCA GTTTTATTGG AAGTTCATTT TCCTGAATGT TTGGAAGAAA GTCTAGTGAC TCAGGATAGC
ATTTCTAATT TCACAGAGTT ATTTTTCOGT TATGAAACAC AGATTGCCTT TGAGGTCCTC TGTPTCTACT ACTGCCCTC
ACTTTTATGT GGGCTCTCTC TTCTCTTGT TTCTGGAGAA CCTTTCTCTG TTCAATTCTG TTTTAATTTT CAGCAGTTT
TTTTCTGTGT GAGTGAGGCT GTTTCCTAGC AGGGAGGTCT GGTGGTTCAT TTTCAAGTTC ATCAGGGCTT CATCAGGGCT
TGTCACCTTC AACCTTACG CTATAGGNC CTNIGCACCA TCTGCANTCT TCAAAATGTG CCCACTGGTT CGTCCCATG
GANGGCTGT TGTAAATTG GGCTTTTAGG GGGGGCCATG GAAGGAGCAA ATC

SEQ ID NO:167: (Length of Sequence = 285 Nucleotides)

TTTACTCTTA AAAGTGTAC AACAGAATCA TGGACTGACA CAGGTAATGG CTGAGCCATA AGCAAATCGA GAAGTACAGA
AATGTCCAC CCCAAACAGC TGCGGAGTAC ACATCACACA GGGCTCTGG TCCCGGCTT CTCAGGTGCT CTGGAGTGA
GGATCCTTTG AGGGAATCT GACCACTCT GTTGTCTACC TAGAGAGCAC GCCACTTGGG CCACCTACCC CCAACCTTTG
GCCAAAGGAG TGAAAGGACC TGAACCTGT CGTCAACCTC AGCAT

SEQ ID NO:168: (Length of Sequence = 327 Nucleotides)

CTAGAGGGCA CTCGTATAC CCGTCAGCTC CTGGAGCCAT TCATCTATG CTGGGCAGAC AGGCTGTGAG AGGACATGGG
GGACGGTGA AAGGNTCAA AGACGAAGCT GINGTTTATC CTGTGTGGTT TTACACAGGG AATGATGAAA CATTGAAGGG
GTTTAATAAG CTTTCTTAA AACATTTTCC CCTTAAACAG GCTGGCACTA TGTCGAAGCT GCCCAAATTT GAGATTGATT
TACCAGCTGC GNCCTAAGTCA ACTAAACCCA NGCCTTTCCG AAAGAGACAT CGCAANTGGC TTACCCAANG TANTGTCCCG
TTTTTCA

SEQ ID NO:169: (Length of Sequence = 346 Nucleotides)

GGTCTATGG AGAGCCGGCC GTCTCCAGG GTGAGCTGG GGAGGCTTCT GCGGTTCTGG AGTCCCGGGG ATGGCGCCAG
TTCCCCAGCA AACCCCTCC AGAGCTGCCC CCGATGCAC AGACAAGGAG GGGGCTTGGG AGTACTTGA GGCTGTGAGC
GRTGCGCT CCGTGTGGG AAGTGAGTCC TCTGTGGCCA AGAGGTGAGA GTCTCCCTG AGGCTGAGTC GAACACAGAC
CCGTGGCCCT CATAAAATTA AACATAAAG CACAAAATG GCGCAACCA GACAGCATTG GCTTTCAGAC AGGCAGGGAC
ACGGGGGCC CTTGTGTG ACCTGT

SEQ ID NO:170: (Length of Sequence = 398 Nucleotides)

TGACCTCAA CTACTGAGC AATGCCGTAG CTATGGAATA GAAGCATTG TTGCACTCT TTTGTGAGCC AGGCCCTGTA
GGAGGGATTG TGGATGGCAA AACCTCAGGT TCTGCCAAA TCCTCCCTT GGGGGCTGGA GGTCTCTAG TTAATTGGCA
TTCCGGTGCT TAAGGCCACT TTTGGGTAGA GGTGTGGCAA GGATGGAGTG TCCAGACCTA TGATCCTCTA AGAATTTAC
CTTTTAAAAA CAGCCACCCA AATGGTGTG GGTGGGGAG CAGGTGGTGG TGAAGGGACT GGGGGTGTCT GGCCATKGCC
ACGTACCAGA GGAGACTCTG TGAGCCCTCT CCTGCCTGA GGGACACTTA ACTTTTATAG CACTACATAG GGTCAACG

SEQ ID NO:171: (Length of Sequence = 321 Nucleotides)

AGACAGCATC TGGCTCTGTC ACCCAGGCTG GAGTGAGTG GCGCAATCTC GGTTCACTGC AACCTCTGCC TTCCAGGTTT
AAGTGATTCT CCTGCCTCAG CCTCCCAAT AGCTGGGATT ACAGGCATGT GCCACCATAC CCAGCTAATT TTTGTATTIT
CAGCAGAGAC GGGGTTTAC CATGTTGGCC AGACTGGTCT CGAATCTCTG ACCTCAAATG ATCTGCCCAT CTAGGCTCTC
AAAAGTGCTG GGAITATAGG TGTGAGCCAC TGCGCTGGC CCTTGGGTAA ACATTTCAA TGCAMCCAAC CATTAAAGGT
A

SEQ ID NO:172: (Length of Sequence = 293 Nucleotides)

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GGAGGCTGAG GCGGGCGGAT CACGAGGTTA GGAGATGGAG ACCATCCTGG CTAACACAGT GAAACCCCTGT CTGTACTAAA
 GATACAGAAA ACTGGCCGGG CGTGGTGGTG GGTGCCTGTA GTCCAGCTA CTGGGAACCT CGGGAGGCTG AGGCAGGAGA
 ATGACCTGAA CCGGGGAGGC GGAGCTTGCA GTGAGCAGAG ATTGCGCCAT TGCACTCCAG CCTGGGCGAC AGAGTAAGAC
 TGCTCCAAA AAAAAAAAAA ATAATAATCA AAGCTCTTGG ATTTATAGTT TGGTCCCCAG CCTTGTTTTG ATCTTTCCCT
 TATCCTGTTT TATTGCCATT TACCACGTCC TTTTGGAAAC ATCCCTTTCA ACTGCTG

SEQ ID NO:161: (Length of Sequence = 273 Nucleotides)

GCAGCGGCGC CGGGCGAGGA GGCGGCAGGG GCGAGGAGGG GCGCGCGGGT GGCGACCGC AGGAGGCCAA GCCCCAGGAG
 GCGCTGTGCG CGCCAGAGAA GCGCCCGCC AGCGACGAGA CCAAGGCGC CGAGGAGCCC AGCAAGGTGG AGGAGAAAAA
 GGCGAGGAG GCGTGGCCA GCTCCGCGCT GCTAGCCCC CTTCGCGCGG GCGCGCGCG CCGCGGAGC AAGGAGGCAG
 CCGCGCGGA GGAGCCCGCG GCGCGCGCAG ACT

SEQ ID NO:162: (Length of Sequence = 286 Nucleotides)

TTTTGGTCAA ATAAATCAGA GTACTACAAT CATCAACAT CTGATTCAAT TAACATGTGA GCATCTATAC CTGCCCATTT
 GTGTGAATAT TCAGTATATA TCTACACCT ATTCTCATGC CTTCATTAT TGTGTTATG GCTGTAGATA TGGAAAAAAC
 AGTAGCTGAG ACATTTTTAT TATGAATAT ATTATACCTT AATCAATCAG TCAGAAAATG CTTAGGAAGA AGAAATGCAT
 GATTGTAAAT GCATGATTTC AACATGCTAC CCGGCCAACA AAGTTG

SEQ ID NO:163: (Length of Sequence = 342 Nucleotides)

TGCCCCAGGA AGACAGAACA TGGAGAACCG TCAAGGCAGG AACCCACAG ACTGTCCCTT CCAGCCCACA CTCTGCCACC
 TCCTGGCCCT GTCCCAATTC TGAGCCAAGG CCTCCCGAG GCAGAAGTTG CCTGGTCCTC TGTCCCCACA GTGACCTGAC
 TGGGGGTGAG GGAGAAGGAG GAGAGAGCCC ATGTGTGGTG TGTGTGCCCC TGAGAACTTC GTGGTACTG CCTTTGGGAG
 CCGCAAGTG GCCAGAGGCA GGGGTAGCTG AGTTCTGGG AGACCCCTTT TTTTCCCCCA RGTTCGCCAG AGGGCAACGC
 CATCAGTAGC AGTGTGGTGT TT

SEQ ID NO:164: (Length of Sequence = 392 Nucleotides)

ATTACCCGGG CCGCGCTCC CTAAACAGA TCTACGACC TTAACGAGC CCATGCTGAG GCTCAITCCA TCCCTGCRGA
 CGTATGCAGA GCGCTCACT GCTGCCATGG TGGAGTTCTA CACCATGTTA GGAGGAATTC ACCCAGGATA CACAACCTCA
 CTATATCTAT TCACCCCGTG AATGACTAG GTGGGTGAGA GGCATCTTTG AAGCGCTGAG ACCTCTGGAG ACCCTGCCCTG
 TTGAAGGCCT CCTTCGGATT TGGGCACATG AAGCTCTGCG TCTCTTCCA GATAGACTCG TAGGGGATGA GGAGAGGCGT
 TGGGACTGAA TGAGAAGATC GACACGGTTG CTCTGAAGG CACTTTCCCT AACCTTCGGC AGAGAGGAGG GC

SEQ ID NO:165: (Length of Sequence = 406 Nucleotides)

GTTATAATTA TCTGTTTTA TTATTIATTG TTTATCTCTT ACTGTGTATA ATGTAGAAAT TAACTTTAC CATAGGTATA
 TACATATTGG AAAAAGCATC TTATATACAG GGTITGTTAC TATCTGTGGT TTCAGGCATC CACTGGGGGT CTTGGAACAT
 ATCCCTTGCA GATAAGAGGG AACTGCTGTA TCCATAGAAT AAAACACCC CATCTTGAAG ATAGGAGGTT CTGTAAATTG
 GGATGGGGTC AGGGAATCTG AATTTTAAAA GTTTCCCATG TGATTGTATG CCCAGCCAAG GCCTGGGGAC CACTGTCTTG
 AAATATAATG CTGAGGAAGA TACTGTCTTT GGATTTTCTT GGTAAATCCG AGTGAAATT CTCAGGCTGG AACCTTATGG
 GCCTTG

SEQ ID NO:166: (Length of Sequence = 453 Nucleotides)

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SEQ ID NO:154: (Length of Sequence = 405 Nucleotides)

TGGAACITGT GAGTGGGGAC CCATGATGTA TGGGTCTCAC CTGACTTGAG GTGAATTTTG GAGTGAAGGG CCTGAGGTC
 AGCTCCCAGG TCGGTCTGTC TGGGCCAGGC CTGGTTTTCA CAGGGGCTGA AGGATCCCAG TCCACCTGTG TGCATGTCAG
 GGCTCGGCGG GGAAGAAGCC AGCAAAGTCC CCCGTGTCCC TTGCTGAGTA TTCTGTCACA GACAAGCCTC CATTAAAGCC
 ACAGCAGTGC TACCCACCAC ACACACCTTG CTGGCCCGGC CACCACTGCT GGCTTCAGCC CCTTNAGCAG CCCATGGNTT
 AGCAGACCCT CAGATGTAGG TCAGTGGCCT TANCITGINTC TATCCATGCT GTTAAACTCC CTGCCTCCAA CTGGGGGTCA
 CCACT

SEQ ID NO:155: (Length of Sequence = 40 Nucleotides)

CCATGATCTT ATTTATTACA TCTAGTTTTT CTTTATACCT CTAAAAAAA GTGCCTTTTA GATTACAGC TTGTGCTTCT
 AAAGCAAAGG TTAAACATC ATGCCCAA GGAACAAG GTAAAAAGGA AGCTGCCATA TAAGCTCTTA AAANTGTAT
 GTTACAAGGT TCTAAAATCT CTTCACTACT GGTGTGTGG TAGATTGTAC GACACTGACA TGGTGTGTGG GAGGGTCATT
 TATCTGATGG TTGGAGCAGC ACCATGGGAA AGCTGCCAG ATGGTCTACT GAAGTCTTG GCTGTGCACA GAATGGGCCC
 AAGGGCCAGN AATTCATGAG TCCGGGGAAC TTTGGNGTC CTTACTCAAT CTCCTTAGTG CTAAAGNTTC AGAGTCTCAA

SEQ ID NO:156: (Length of Sequence = 443 Nucleotides)

GTCTCTGGA TTGCTTCGTT GGTGCGAAC TTAAAGAATG GCAAACCTGTG ATTGNTCCG ATTAAGACAA GCTTTGTAGT
 TTTCTTGTG TAAACACCAA ATCCCGCTG GGCCATGAGG TAGCAGAAGT GGGCCGATC CAAGAGGCC CTTGAAGCCA
 GAGTGTGCCC CATGGTAGCC ATCGTCTGG ACTCGACGTC CATGTTGTG TTCAAGTTGG ACAAGACCAT GGCAGGTTGC
 GGCCTCCAAT CTCCCATTT CTGCTCTCCA CAGCAGTGG ACGCGGCAGG CATCCGTCCG GACATGAGCT GGTAGACTGT
 CTTCAGAGGG TCGTTGATTK GGGAGGCTTT TTAGCAAACC TKGGTCATGA CTCGGGCGTG TGTCCGCTG TTCCATCTTA
 CTTGCAAGTA GCAGAGCGTG ACCCCACAAG GCCATTCTTA ATT

SEQ ID NO:157: (Length of Sequence = 383 Nucleotides)

ATTGGAAGG GTTTAAACG GAGTCGGAAC CTGAGTAGAT TTCAAATTT TACAGCCAGG ACTACAGAAG TGCATCATTC
 TAGAATGTGT AGACCTGAGT AGCTTATACA CTACAGAGCA CTTTGCTTAT TTGAAAGTAA TTCAGCAACA GGTCACTTTG
 GGATATAACC TGAACCTTTT TTTGGAGTGG GGTGGGTAGA CTACAGTAGA CACAAGGGCT GGACATGCAG ATGCTTAGGG
 GATTAGCGTT TTTCATAATT TGTTCTGTT GTCAAGTTCAT TCCTGTGTGT TCTTACCTCT ACAAAGGTAC ATTACACATT
 TTARGTTTTT TAGTGACCTT TAACCATGTT ACTTGAAGCA TTTTGGATA TAAAGCTATT TTA

SEQ ID NO:158: (Length of Sequence = 241 Nucleotides)

TGGTSTGTGG CTCAGCTGCA GCGGCASGTA AGTGGGTSTC CAGGGGAGTG GACAAGCAAT TCTCCTGTCA TTTGCAACTT
 TCTTCAGGAA CTCAGATAAA GAACACTTGG ATAACGATGA TCCTGTGAGA GGGATTTTAT CTGTACCATC ACACATGGAA
 GAGGAGTTTC TAGGTACAGG AAGGCAGCTN CTAAGCTAAA GGTTCCTTGG TCCCTGTGTC CTGGCATGCC TTAAGGAGGG
 G

SEQ ID NO:159: (Length of Sequence = 224 Nucleotides)

CTGTCAATTA TGGCTCACTA AAGGGCCAGC AGTTTAAATT ACACAGGTTG CACTAAAAGC TGCAGCTTTG GCCAGGCAAG
 GTGGATCAGC CCTATAATCC CAACACTTTG GGAGGCGAG GCGGGCAAAT CACCTGAGGT CAGGAGTTCA AGACCAGCCT
 GGCCAATATG GTGAAACCTA AGCCTCTACT AAAATTACAG AAATTAGCCG GTCTGGTGG CACA

SEQ ID NO:160: (Length of Sequence = 377 Nucleotides)

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GGGTCAGTTT CCCAGGCCAT GCGGGGGGTG GCCATCTATG CTAGGGCTGG AAGCTGAGGC TGGCCGCCAA CTGTGGGGCT
GGGGTGGGGG TGGGTGG

SEQ ID NO:148: (Length of Sequence = 278 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCGCCC AACCCCATC GTCACCTGTC
TGCAACACGA CACAAAGGTT TAAAGATCTG GGCCCAAAGA CTCTGGGACC CTTCAAGCAA GTCAGGTGGA AGAAGGTTTC
CCCACCCCCC ACCAGGCTTG TTTGTCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG ATGCTTGATA
GGAAGATCTT TGATATCAAT GGCTAAGCT CTGCTCAT

SEQ ID NO:149: (Length of Sequence = 368 Nucleotides)

TTTTTTTTTT GTTTTCAACA AACTTTACTA AATAACCTTG GAAAGGCAAT GAACGATCTG ACAATTTAAG CTCTAATGAT
TTAAAGCTCA GCTAGAAGAA AGTGAGGCAT GACATATACT GTCAACGGAG GGTGAAGGAG GCAGATTTCT GGAAATGCAA
TGATCCACCA CATTGTCTTC AAGGAGAAAC CTGCAGACAT ATTTTCAGGT CTTGCTAAGT AACAACTGTT TATTTGTAAT
CAATACATTT GGGGAAAGTC TGCTATGTAG CTAAGGTCAC TGTGACCACA GACCAACAGA TGGAAAGGAA AAAGGCACTG
GACCAGCAAG GAAAAATACA TCCCATCCT CAAAAGAATT TTAAGGTG

SEQ ID NO:150: (Length of Sequence = 367 Nucleotides)

TTGTGAAATG GGCCTGGGTA GATAAGGAAA AGAACCTCCA AGAGGTTAAG TGATTTGCGG ATTTGCCTAA ATTATACAGA
AGAGTCAGCA CCAAGTCCCA GGCTTCTGA TTCTTAGTGC AGTAAACACT AAGCACCATC ATTCCATTTT ACCACACTCC
TGCTTGCTG TTGTCTCAG CTAGAAAGC CTACCCCTGA GTTACCCCTT TCCATCTAG AGCCTTCTG CTGCTGTCT
GCCCCCTGC GATGGGGACT TCTTTGGCCC TTCTCACCA GCCAGCCTC TGCCCGTTT CTTCTCTCT TCCACTGCGG
CTGAGCTCTT TTCTCCTTCC GAGAAGCCTT TCCTTCATCT TTCTGG

SEQ ID NO:151: (Length of Sequence = 366 Nucleotides)

CCCAGCGGGC CGCCTCCCTC CTCTCTCTC CATAGGTGGG GGTGTGGGC CTTCTTTTTT TTTTGTCTT GGAGGGCAGT
TAAACTTCTC CATTGCTCTC TCTCTTCACA CCCAAATGCC AAAGGACACT TTCTCTTCT TTTGTGGGTA GTTGCAAAAA
AAAAAAATTC CTATGGGTTA CTGCACTTT TAAATACTTT GTAACTTAAA GGCAAAGTAG TATGTCACIG TTTCTTTTCC
CTGTAGTTTA CTTTGTAGGT TAAACATCTT TCCATGTCTT TATTTGGTCAA ATACAGTTCC TYCTTTTGTA CAATGTAAAT
CCTAATATGG ACCATTTTTC CTAATGGGAT TACGATTTT TTAAAA

SEQ ID NO:152: (Length of Sequence = 269 Nucleotides)

GTTATCTGCG CAAGTGCTTT CAGGCGCTC CAGGGTTTGG CTGGTCACCA TGGAGGGGGG GTTCAGGTGC TGAATTTAGG
GACCCAGCA TCTCAGAGT TTCCCTTCC ATCTTTCCA GTGGCACTGT GTCTGAGCAG GTGTGCCAG GTGAGGTGT
ATCCACTGTG TCTGAGCAGG TGTGCCAGG TGAGGTTGTA TCCACTGTGT GTGAGCAGGT GTGGCTGTTG CAGGTGGAAG
TGGGGATAIN TGGGCACCTG GGTGCCATT

SEQ ID NO:153: (Length of Sequence = 260 Nucleotides)

TTTCAGGATT TTATTTAAAA TTTATTTGTA TGGGGTCCGC GCAAAAGGAA GGGGTGGAGG GTGGGGTACA TGCAGGGGAC
ACAGGAACAN GATCCACATG GCCAGGNC CAACCTCTTC TGTCTGGGG AAGAGGGATG AAAAGACAAG ACCAGGGCTA
NGAGCTGGGG TGGAGAGGG GAGGGGNAAC ACTGGCTGCA TTCCCNAC CCCANGANG ACCTATAGGC CCTGGACCCA
TGGGTACCC TGGGCCCTAG

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AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC
TCACTACTC TGGGCCTGCG CACTGGGGTT GTGG

SEQ ID NO:142: (Length of Sequence = 373 Nucleotides)

GTTTTTGCAA CACTTTTTTT TTAAGTTATT GGGTGCAAAA TCCCAAACCA GGATATGTGT ATGTCTGTGT GTTTATGTTT
TINATTGAC CCTCCCCTCT TTCAACCTAC CCCCTTTTAT ATCTAATGTA GAAAAAGCGA AATTGAATCT GGAAAGCAAA
CTGTGTATA TAGTTGCGGT AACAAATCATG AAGAGAGAGC CGGGCTGTCC AGTTGTTTTT GAGACAGAGT CTCACTCTGT
TGCCAGGCT GGAGTGCAGT AGCATGATCT TGGCTCACTG CAACCTCCCC CTCCCTGGGT TTAGGCGATT CTCCTGCCTC
AGCCCTCCCA AAGTAGCTGG GATTACAGAC CGTACCACC ACAACTGGGC TAA

SEQ ID NO:143: (Length of Sequence = 262 Nucleotides)

CCGACCTCG GCCAGAGGG GCTGCAGCAG CTGCTMCCTT TTCCCTGCCG CCGCCTCTCC AGTCCCTTTT TTAATTACCA
CTCCAMCTGC TGGGAACGGG CGAGAAAGAG GAGGAGGCGA GAAACTCCCA CCGACCCACA GAGGGAGCAT GATTTCGGCA
ACTTCACCTA TCATTCTGAA ATGGGACCCC AAAATTTTGG AAATCCGGAC GCTAACAGTG GAAAGGCTGT TGGAGCCACT
TGTTACACAG GTGACTACAC TT

SEQ ID NO:144: (Length of Sequence = 384 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTTT CCCTGTCCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA
GGAACAAGGC TTGGAAGTCA GAGGTCTCAT CTTCAGTGTA ACAAGCATA AAGGACTTGG GGTGAGCGT GTGINTGGGC
TCAAGTGACC ATGCAAGTCC TGTCACCTCC TTCTTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTTCTT
CAAAACAATA ACAGAAACAC ATCAAGCTTG GGGTCACTG AATTCAAGTT CTGATTCTC CCGTACCCC AGCAACAGTG
CCGAGTTTGA TTGTGACACT TTGACCCAGC ACTTGGTTTT GAATGTTCTT TTGGCTTGT ACCG

SEQ ID NO:145: (Length of Sequence = 324 Nucleotides)

CTACATGGAA TCATAAGTGT TCCTAAAAAA GGAAGACAGA TTTGAAGACA GAGGAGGAAG GTGATGTGAT GATGGAAACA
AGGGGAGAAA ACGCAATGTG ATGTGGCCAC GAACCAAGTA ATGAGGACAG CCTACAGAAG CTGGTCAAGG CAAGGAAACA
GATTCTCTC TAAAGTCCCT GGAGAGGGCC TGGCCATGCT GACACCTTGA TTTTCTCCCA GCAGAACTC ATTTTGGATT
TCTGGCCTCC CAGAAAAGTA AGGGGGTAAT GTGCTGTTTT ATGTCAGGTT TKGGGTAAAT TGTTTATTGC AGCCATCGGG
AAGG

SEQ ID NO:146: (Length of Sequence = 355 Nucleotides)

TTTGCTCCT TCCTTCCCTA TCCAAGCAAG GGTGTGGTGA CAATGACCTG ATCGGGGTTT AACGCGGGCT CTGTCTGCTC
ACCAGACCTG GGGTGCTGAG CTCTGACCAG CCTGGGCAGC CCAACCCACA GGAAGTGGG TTTCATAGCT GGGTCTTCAG
GAAGGGGTGG AGGCTTTGGG AGTGGCAGCT CCGCGCTCC CACCACCCCA AGCCAGAGAA TGGGGCAAAC TTGTATGCAT
GGCTTATCTC TAAATTACTA ATCTGCTTCG GACCAGACTC ATCTCTACAG TATAGAGTTA GAGTTATTGC TTCTATGACA
GGTGTTCCAG AAGCCCTGGG TGGCTTTAAA GTCTG

SEQ ID NO:147: (Length of Sequence = 337 Nucleotides)

CAGTTTTCTG AGTTCCCGTG TGCTAGACTG GCCAGAAGAG AGGGTCTGGG GCCTGGTCAC TCGGCCACTC TCTCCTGTTT
CTGGCCTCTT CTCCCTTCAC TCCGCTCCAG TCTGGTTTTG AGAGCAGGGG CTGTCTTACA GCACCTCAGG GAAGGGAGGA
GAGATACCTG CTGCTTCAT TGCTTTTCCC TTCTGGAGT CGATGCCTTT CTAAGGGTTG GAGCTGCTCC TTGCAGGGGC

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TAAGGCTCA CTCGCGCTG TGAAGGTCTC TGATCACACA GAAGCAGCCC TGCCCAGCCT GGGTCATTTG CTGTCCGCTT
 TTCTCTGTGA CCACAAGCAG CCTGAACAA CCAGTATGTG TCTTCTTTCT CCAGATAGTG AAAAAGGGTG TOCAGATAAA
 CCCACCTAAG TGAATGGGC CATCCTCTAA ACTGGGGTAC CTCACTGCAC AGGTTCTAGG TAGGCTTTCC ACTTAATCTA
 ACTTGAGGCC TACAGGTACC CTGTAAAGTT AGTGGGGCTT GTCTTGATT GTGG

SEQ ID NO:136: (Length of Sequence = 279 Nucleotides)

CAGTTGGAC AAAGTAGCAT AGTGACTTIN TTCCTACANT GACTTTGGGA GAAGTINGCA GTTCTGGCA AAGTGACGCT
 GGGCTGTTG AAAAAGGCAA GCTTAGCCTA GGCTGCCATC TTAAACATT TOGAGGCTGT AGCTTCCTCA GGATCCTTTG
 CCTGTGTTCT GGTGGCCGGC AGTGCCCGT CTAACAGCTT TTAACCTGC ACTTAGTGCC TGAGCACCTA TGGCTGTGAG
 AGATGCTAGA TACAGAACCC GTCTCTGTAC CACGTGGGG

SEQ ID NO:137: (Length of Sequence = 518 Nucleotides)

CAAAATATTA ATGGAGATCT TCCTTGTTGG TCTGTATAT GTCATCCGT TTCTGGGTGG TTTAGGAGAA TCTGTACTAT
 TTCAGCATGT CCTCTCCAG CAGCAAAATG AAGAGGAGAA CTAAGTTGTC CATTTAAAAG GTTGGATTG CACTTTCCCT
 TCTCTAACAA TATGCGAGTG GCCTCAACTT TTCATACCA GCATGCATAA TGAATGGGTG CCCAGTGGTC ACTATCTAAC
 TGGTTGACTG AAAATCTTTC ACTGAGAAGA CGGCTTAGTA ATTCTGAATC TCCTTCACAG GCGCTTCGGT GGAGAGGAAA
 ATCATCTACC CACTGTGTT OCTTGCTTC TGTCACACTG CTCATGCTTC TCTGCCAGTT TTTCTGTTT AGGGTATTTG
 GATTTTGTAG TAGTCTGGAG CTCCTAGACC CAAGTATGGA TTTATTACC ACTTATCTAC CGATTTGTA TACTGAGGAT
 CCTATCCAAC AAAGGGTGT AATCCAGGAT CCGCTTC

SEQ ID NO:138: (Length of Sequence = 266 Nucleotides)

GATTGCAGGC ATGANOCACT GCGCCAGTC GAGTGGTAAT ATGTTMAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA
 GAGGTAAAA TACTGAGTAG ACCATMCTGT AAACAGATGT MCTGTTATYC GGGCTTTCAT ATTCCATTTA TAAAGCACAG
 GCAGAGCTCA GAGTAGATTT AAYGTAACTC TGAAGGGCAC TAGGATTTTC AGAATGGTAA ATAAGCATTG GCTTCACCTT
 AAATYCAAAT CTGCATTGGG CTGTGA

SEQ ID NO:139: (Length of Sequence = 341 Nucleotides)

ACCTCGCTCA CGCTCTGAC CACCGACAG CAGAGCAAAG GATGCGGGAG TTGCTCTGC TGCCATCTA AGGGGACGTA
 GGCAGAGAAG CAAAGGCCTC TGCTCTCCCT CCATCCATCC CGGTGTGCTG GCGCCAAACG AACAGGAGTC CTTCAACTAT
 TGCTGCCAG AGACCCAATT TTAGGGACTG TAGTCTGCAT CTGGATGAGC TGGGCTGTAG ATTGAAGTCT CAGAAGCAGG
 GAAGGTGGA AGGGGTAGG TCCAGAGCC CATGGAGTTA TTGCTGAGAA GATATGCAGG GGACACATTT CCCAGGGGCA
 GAGTAGAAGC OCTGGGCCTT G

SEQ ID NO:140: (Length of Sequence = 234 Nucleotides)

GTGAAGGGAG TTGCAGAATC AAATTGCTAC ATAGGCCAAA CAAAAAGAA GGCTTTTCA AAAACATT AATTACATG
 CAGTCTCAGA GACTATTTAG GCAAAGTCA AGTTAGGAGC TTTTAGGATG TGGGANTAAA ACTTTAATKG GAGGGGAGGG
 CTGCTTCTG GAGAAGGAAG AAGCCAGACT TGTTAGACAG TACTCTTAAC TCCTAGCCCA GCCTAGCGTG CCT

SEQ ID NO:141: (Length of Sequence = 354 Nucleotides)

CAACTCAGGT TAGCACTGC AGGAAACTT TCTTCATTT CACTGAATTT TAAAGAGAGA ATCTGTCTC TATTCTCAG
 AGAAACTTAG GTGAAAAGTA AAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTA TTTTATCTC TTTCTCTACT
 CATGTGCTTA ACTGGTGAAG TGAATCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCTTATGG CAACTACAAC

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GCCTTTAACA TCCTCTGCCA ATRACTGGCC TCAAATCACC AGTGGAACTT TTTCAAAAAA TACACCATTG GCTCTATGTA
GTTCTACTGA TCTRAAATAT CCACGTGTGG GCCAGGAGCA CTGGCTCATG CCTGTAATCC CAGCATCTTG GGAGAGCGAG
GAAGGAGGAT CATTTRAGCC CAGGAG

SEQ ID NO:130: (Length of Sequence = 307 Nucleotides)

ATAAAATACT TAGGAATATA CCTAACCAAG AAGGTGAAAA ACCTCTCCAA GGAAACTAT GAAACTCTGC TGAAAGAAAT
CATAGACTAC ACAAATACAT TTCATGCTCA AGGATGGGTA GAATCAATAT TGTGAAAATG GCCATACTGC CAAAAGGGAT
CTWCAAATTC AACGGTATCC CCATYAAATA CCACCATOMT TCTTTACAGG NITCGGAAAA GGAATTCCTAA AATTCATATG
GGACCCAAGA CGGGGGCCGC ATAGCCCATG GCCGGCTTAG GAAWAAGGGA CAAATCTGGG AGGCCTT

SEQ ID NO:131: (Length of Sequence = 184 Nucleotides)

CCAGGTGGA TGGAGTGCAA TGGCAGATC TCGGCTCACT CACCTCCC AGGTTCAAGC AATTATCCTG TCTCAGCCTC
CTGAGTAGCC GGGATTACAG GCACGTGCCA CCACACCCAG CCAATTTTIG TATTTTITAGT AGAGACGGGG TTTCACCGTG
TTAGCCAGGA TGGTCTCAAT CTCC

SEQ ID NO:132: (Length of Sequence = 270 Nucleotides)

GCNCGAGGGC GTCGAGGGCC AGGAGCTATT CTACAGCCCC GAAATGGCTG ACCCCAAGTC AGAACTMTTC GMEVAGACAG
CCAGGAGCAT TGAGAGCACC CTGGACGACC TCTTCOGGAA TTCAGACGTC AAGAAGGATT TCCGGAGTGT CCGCTTGCGG
GACCTGGGGC CCGGCAAATC CTCCGNNNC ATTGTGGATG TCCACTTTAA CCCCACCACA GCCTTCAGGG CACCCGACGT
GGCCCGGGCC CTGCTCCGGT AGATCCAGGT

SEQ ID NO:133: (Length of Sequence = 529 Nucleotides)

CTTGCACTAC ATAGCATGTG TATTACTGAT AGCTTTTATAA ATCTGCCAAA TAACATAGAA TGTAGCCTCA AAAGGATGGT
CGAGGGTTTC CAATCTTTCT TTCTCCACCC AGTGGTGTGG AGCAACTCTG TGCCTTAAAG AGGGCACCAT GGAAAGAAAC
AAAAAGGAAT CTCTTTCAA AATGCTGAAA TTAGGCTTAG CTCACTACTT TCAGGATAAA GACAACCTGCA TCTAATTAAG
TCCACTCCAC ATTTCTTTGG ACTCTAAGTA TTCTGCACCT GAAGGCTAAA TTGAACCTGC TCAGCCCTAT CTTTTTTGCC
ACATCTTTAA TTACAAATCT ATTTCTTCTT CCTTTCATTT ACTTCTCTTC TCTTAAGTAA GAAATGTGGG AAATGAGACT
GGCAGTTTGG TTTGTTTGCA TGTGGGTGTC CATTAGGCGT CTCATCCTAT GGCCCTTTTT GGAAATGTTG CCTTCCTACT
ACACACCTGG GAGGTTTCCC CAAGGCTCAA CCTTTTGTCT TCAGGTAAA

SEQ ID NO:134: (Length of Sequence = 437 Nucleotides)

GACGGTGGCG ACGCGTGAC CGGGATGTG TCCTGCCACC AGAGGAGGTG TCGTGGCGG GGAGCAGAGG GGCTTTGTTT
CCCAGGTGAA GGTGCGGCTT CTTCATCTTT AGAGGTGCGT GTGTGGGTGG GGGTGCTTGC TGTGAGGTT TATGCGTGTA
ACTGACAGCT GTCCCCAAG CCATGCTGGC AGTGTGTAGG TGTGCTGCCG GCCACCGCAG AGGAATCCTC TGGGCTTCTG
TGGTTCAAGT GGGGCCAGC GCAGAGCTCC ATGAGTTGCT GAGCAGCCAG CCTTCAGCA TCCTCTGGGT TTGTCAGCA
GGAGGCGTCC CTTGTGCAA TTCAGGGGGC CGTGGGGGCT GGGGGCACTC GTAGCAAGGT AAAGGAGCCC CTGCTCAGGC
CCTTGTTTGC TCCCTTTCT TGCAAGAGGG GTAGAGC

SEQ ID NO:135: (Length of Sequence = 534 Nucleotides)

GGCATTGTTT TGGTGGGTGT GTACGCTCC CAGAAGACTG AATTATGGT AGGATCACTC GCAAGGCCTT GTGAAGGAGT
CTTACCTAAA ACAAAGAAA TATCAGGGAC TTTTGTGAC TATTTACAAC TCAGTTTAC ATTTAAATTC AGGCAGTGT
AATATGCCAA GGTAGGGAAT GTGCCTTTT CAGAGTTGGC CAGGAGCTCC TGCTGGGAC ACGGAGAGGC AGGTGTGGCG

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ATCCAGGCTT TCATTTCTAG CCAACCCCTCA AACACCACCA ACTACAAAGA AAATTTAAAA GTCTAATTG TAACCTTCAG
ATAAGTATAA ATTAGTTTTT TCTAGGCTTT CATTATTTGG CTTCTTATAC AATCTATCTT GTAAAGTACA TTCTCTTAAA
TTTACATTAT CTAAATTAAG GGCTAAGCAT TATTTAAATC ANTTAATCAT ACAATATTTT ATGGCAATAT GCACATATTT
ATAA

SEQ ID NO:124: (Length of Sequence = 330 Nucleotides)

CTCAGCGTAT CATAGGCGTG CTCACCTCC TCCCCAGCT CCGCCCCGC AGGCAGGTGG TGTAGGATAG AGTGGTGCAT
GAAAGGGGGG AAGCCCGAGG GCGCCGCTGG GAAGGGTGT GCGCCGTAAA GGGCATCCCA CTGGCACTGT GCGTCANCTG
CGCTTTCTG CTTAGCTCA GCCAGTCGCC GCGCTGCTC TTCAATCACT TGTGTCCCT TCTGTGCAG AGCTAGTTGG
CGCTTTGGTC TGATGTCTT GCAGTGTGGC TGCCAGGTG CAAGGAAGGC TGCCCGGTG CATCTGGGG GTGAGTAGGA
GCGCTCTTTT

SEQ ID NO:125: (Length of Sequence = 281 Nucleotides)

CCTCTCTCC TTCGTTCTC CATTACCGA GCCACAGTAT TTCTTAAAGC TCGTTGGCAG CCTGCACCCT GCTTATCTT
GGGAGACAG AGTTTGCATC CTATTACAAC CCATAGTTT TGCTAAACCA TGGTGAAGG AACCATCCTT CCCAATCCCA
ACCTCAACCA AAGCTTAGAA AAAGTGCCAT CTTTAACTT TCAGAATCAC TCATAAGTAA ATCTATAGC AGTCTCTGCT
AATGCAATT TCAATGTGT CCGCTTAT AGGTGACTTT T

SEQ ID NO:126: (Length of Sequence = 266 Nucleotides)

CTTTAATGA TGTGTTCTG GTGGATTTA TAAAGGAGA TGGACCCCTG GNAAGATGCT TTCTMAACC ACAACCCACA
CATGGGTCA CCATTCTCTC TTCTCTCC TTCTGTTGGT GCGCGAGAC CTGTAGGACC TTCCCTCCCT TTAGGGTTCT
GTAAAGCCCC TTTCAGTCC TCAGAGTCCA TTCTCTCTT GTGCTGAGGG CCTGCAGTGG GGACCATATA CTTCTGGTGC
TCTAGTTTG CTGTCGCTC GTTTT

SEQ ID NO:127: (Length of Sequence = 435 Nucleotides)

GTCTGGTTCT ATTCATTTTG TAGTTGCGAG AAAAGGAATG AACCGTACT ATGGCAATTC ACCGTGACGT GTGATAATTT
AGTTGCTAT GAGTTTTTAC TCTTAGGTAA AACCTAGTTA TCCTAATTAA TAATTAGTTA TGGATGATAT AGTAATTTTT
TTTTTTTTTG ACTGCGTCTC ACTGTCAATC GGGCTGGAGT ACAGTGGCTG ATCAGATTC GGTGCAGCCT CGACCTCCCT
GGGCTCAGTG ATTCTCTGC CTCAGCTTCC CAAGTGGCTG GGGATTATGG GCATGCACCA TCAATGTCTG GCTAATGTTT
GGTGTGTTTT TTATAAAGC CAAGGGTTTT GCCATGTT CAAGACCCCG GGGCTGGTCC TTGAACCTCT TTGGGGCTTC
AGGCAAGTCC TCCACCTTC GGGCTTCCC AAAGT

SEQ ID NO:128: (Length of Sequence = 471 Nucleotides)

TTCCCTTCCC AAGGACTCGA CCGAGAACC GCCATGTACT CGGAGATCCA GAGGGAGCGG GCAGACATTG GGGGCTGAT
GGCCCGGCA GAATACAGAG AGTGAATCC GGAGCTCATC AAGCCCAAGA AGCTGCTGAA CCGGTGAAG GCGTCTCGGA
GTACCCAGGA GCTCCACCGG GAGCTGCTCA TGAACCACAG AAGGGGCTT GGTGTGGACA GCAAGCCAGA GCTGCAGCGT
GTCTAGAGC ACGCCCGGG GAACAGCTC ATCAAGAAGA AGAAGGAGGA GCTGGAAGCC AAAGCGGCTG CAGTGGCCCT
TTGAGCAGGA GCTGCTGAGA CGCAGCAGA GGCTGAACCA GCTGGAAGAA CCACCAGAGA AGGAAGAGGT TCAGCCCCC
GAGTTTATTA AGTCAAGGGA AACCTTCGGA GATTTCCACA CTGACCAGCG AGAGAGAGAG CTTTAGGGCC A

SEQ ID NO:129: (Length of Sequence = 186 Nucleotides)

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TACCAATTAA CCCATCATTG CTTTTAAACA ACCATCTGAA GGAGCAGAGA GGCAGGGTAG AAGACAGAAG GGGGTCTATG
TGGGTACTAA AGATGTTTCT GTTTTGTAAT ATTGTTGTTG TGTGGGTTTA TGGTTTGCTT AAGGGATCAA AACCTGGAAA
AAATGGGATT CCAGGAATGG CTCTGTTATT TTTGCTGGGT TCCAGCTTGT AATGCCTACT GCCTTGCTTC A

SEQ ID NO:118: (Length of Sequence = 426 Nucleotides)

CCCCACCCA AAATCAAAC TGAAGGTAGT GTCAGTGTAT ATATGGNGTC CCTTGIGCTG AAAGTCAAAG CAGCTTCATT
TTGGGGCCTC AAGAGCTCCA GCTCTGGGCT CTTACCTCT AAGCCCATGG GCAGTGCCCG CCCAGTGGTG TGTATAGATC
GGAGGCTGAG GGCCTCAGCC TTAGCTGAGC TGTGCGTGC TGGGGAGCCT GTGCAGGAGG GTACAAGTAG GAAAGTGCCA
TCTGCATGGG AAGAAAAATG CAGCGTCCTT GGTAGTGGCG ATGGGGTCCA GGAGACCCAG GGAGCTTGCC CAGAGGGACC
TGAGTGGCAT TCCTGTAGGA AAGCAGCCCA GATCTTGGGG CCGTAACGGA TGTTCGTGAA GTTTTGACTT TGAACCACCA
GGTCCCATG TTAACAAGCT TCTTGA

SEQ ID NO:119: (Length of Sequence = 434 Nucleotides)

TTTTTCGGTT AAAAAGGCC AAAACTTTAT TTAGTTTCA GGGAAATATA AGATGCATGT AAACATAAAA TACAAAACAA
AACCCAAATC TTACAGTCTA GAAGCATGCC AAGACAGAGC ATTTTCTGCA GACCAAAGAG TCCCGTCAA GTGATAAAGG
ACACCTGGAA AGTGGCAGGC CAAGGGGCTG GTCCCTTCCC CAAGGGCACT GCATTTTGT GATGAGATTA AAAACAAACC
AACTCCACTA TTA AAAAATGC TAGAAACATG GGATAGTTTA GCACCACCAT TGATTCGGC AAATATTTCA GCACTCACAT
CGACTGCACT GAGTTTAATG TCCTTTCTCC AGTTTCTCTG CTGAGGAGGG AAGGAGGGAA ACCTGGGCGG AAGGGGCTCC
TCCTGACCCC ACAGGGCCAC TAGGAGCTTG GAGG

SEQ ID NO:120: (Length of Sequence = 276 Nucleotides)

AGGAAGTGT AGCAAATGCT ACCATGTGGA ACACTCAACT TTATTTGCTT TATTTATATA TTTAACAATT CTAAAGTATT
TACTTCTTGC TTTGACAAAA AATGAAAAAT ATAGGGGCAC TGACTGACTC CTCTTAGGA GAAAAGGGTT ATATGTACAG
CTATGGAGAG TTACGGTCC CCCTTAACA AAGGCAAATA TTAATAAAA AGGGCTTCAT CGGTCAAAA AGGGCTAAGA
GCTGCAAGCA TTTATTACA CTGTACATCG GGCCCC

SEQ ID NO:121: (Length of Sequence = 554 Nucleotides)

ATTCTTTCC TTAATCATAT CTGATGCTGG GATGTTGGTA ACCCCAACT GAAGGCAGCT GCTAAATCTC AAATGCTAAA
AAAATACTGC AATTTTGACA TCAGTGAGTC AGATCAATAC ATCCTCTGGG GCTGATTTTG CTTACAGTT AGGATGAGCC
ATCTTTAAG CTGCAGGCTC AAATGGGATT AACTGAATC TATACCTGGG ATGGGCCATG GACTGAGCTG TCCATGCAGA
AGGACCAGGC TGTCCATGCC TTCCCTGCCC TTTTACTCAC CACTGCACAG CAGCCCCAGT GGGCCTACTG CACATGTCTA
GGAGAAATCA CTCTAAGAAA ACCAACAGGA ACAGGCTTTA GGCAACAAGA GACGTCTCAC TGCATCTCCT CCCACGTCAG
AACTTGAGTA CTGGGTCTTT GCAGCTCAGA GCATTCCTCC CTTCCCTTTC CTGCCCCGAA GGCCTGCCTT TTCTGAGAC
ATATGGCACT CCATGCTGCA AGTTTCAAGC AGATGCAGGT TCTTATGGG CTTTTTGCTC AAAGAGCTTT GGT

SEQ ID NO:122: (Length of Sequence = 238 Nucleotides)

CACCTAAGCA GGTAGACATC CGCAAAGTCA GATGCTTTCC AACATGACAC CTGAACATCT TCCTTTATGC AACACCCAAA
CATCTTGGCA TCCCCACCCC AGGAAGTGG GGGAGGAGGT TATGATCCCT GGGCGCTTCG GCAGAAATGGA GAGCTGAGGT
GTCCCTCCCC TGCTAGTCAC CTACCAGGTG TCTGAGCAGC TGCATGCTCC CTGGCTCAAG TGGGCACTGT ACCTTTTG

SEQ ID NO:123: (Length of Sequence = 244 Nucleotides)

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SEQ ID NO:112: (Length of Sequence = 398 Nucleotides)

CTGATCTGAC AGGAGGIGTA GGTGAGGCAG TAATGGAAGT SATGGGGAAC AGCTGTAAAT ACAGATAAAG CTTTACTCAC
 TOGCCCCACC ACTGCTCATC TCCTGCTGTA CTGCCCCAGTT CCTAACAGAC AGCAGACAGC TACTGGTCTG TSGCCCAAGG
 GTTGGGGACC CCTGACATAG ACTAAACAAT TCACAATGTT TATATTAAC AACTTATTCC AAGTTTCCAT TTTAGACTCT
 GGAACATCTG ACATGGTGAA TCCACAGGTA GTAAATSGGA AGGGAGATAA CAGACAACCT GACGGCCGTG GAAGACGCAC
 TGGGCGGGCA CTGGTGACGG GTCTGGGGAC AGACTTCACA TCTCCAGACT GGCACAGTGG GCTCACACCT GCCTCCCA

SEQ ID NO:113: (Length of Sequence = 444 Nucleotides)

ATCAGTGTCA GTGTCTAACA GAAGGCTCTG TTAAGGATGC TTCGATTTA ACCAAAAGAT TAAGCTTCAG AAACAATCTA
 ACATACTCAA AGGAGCACCA AATTATCAAC CGGCTACAAG GATGCAAAGG ACCTAAACAA CAGATGTCAA AGGGCTTGTA
 AAAACTGGAG CCAGCAACCA TTCCACTTGA AGGAATCCAT CTCAGGGAAA TGCTGGAATC CACACACAAA AGCAGGTGTG
 CAAATAATCA CTGCAGCAAG CCTTCTAATA GTGAACAACA GAGGCAATCC AAATATCCTT CAACAGGGAA CTGAGTAAAT
 ACCAACTATG GGCATATCCA CATAAGGCTC TCTGCAGTCA TTA AAAAGGA TTGCACCTAC ATGCATGTCT GCCATGGAGG
 TCTTTCAGGC CAATGGTTCC ACTCGGAAGG GCAACCACCA ATTA

SEQ ID NO:114: (Length of Sequence = 472 Nucleotides)

TOGGGCCCCA ACGGAGACCT GGGGATGCCG GTGGAGGCGG GAGCGGAAGG CGAGGAGGAC GGCTTCGGGG AAGCAGAATA
 CGCTGCCATC AACTCCATGC TGGACCAGAT CAACTCCTGT CTGGACCACC TGGAGGAGAA GAATGACCAC CTCCACGNCC
 GCCTCCAGGA GCTGCTGGAG TCCAACCGGC AGACACGCTT GGAGTTCCAG CAGCAGCTCG GGGAGGCCCC CAGTGATGCC
 AGCCCCTAGG CTCCAAGAGC CCCCACCGG GACCCACCC TGCTTCCTG GGGCTAAGCT CTGGCCTGGG GCACTCACCC
 CCTGGCTTAG ACAACTTCTC AAGGGCTTGG CCTTCAGGGG AOCCTTGTGG GTCTTGCTT GCTGGGGCCA CCTTTTCTTG
 CTGGGGGCTT CCCCTTTGGC CTACCTTGGG GCCAAGCCCC TACCAACTTT GGATTGCCCT CTTGGGGGCC AA

SEQ ID NO:115: (Length of Sequence = 293 Nucleotides)

CINGGGGCCA TGTGGCTGAT TTCCATCACC TTCCTTCCAT TKGCTAOGGC GACATGGTGC CCCACACCTA CTGCGGGAAG
 GGTGTGTGCC TKCTCACTGG CATCATGAGA GCTGSCITTA CCGGCTCGT GGTGGCTGTG GTGCTCACA AGCTGGAGCT
 CACCAAGGCT GAGAAGCAG TGCACAACCT CATGATTGAC ACTCAGCTCA CCAAGGGGT AAAAAACGAG GCTGCTAACG
 TTCTCAGGGA GACGTTGGCT CATCTACAAA CATACCAGAG CTGGTGAAAG AAG

SEQ ID NO:116: (Length of Sequence = 448 Nucleotides)

TTTGAAAATT TAGAGGATAT TTATTTCTCA GGAAGGTGCA CAACAGCTGG CAGGCACTGC TTTCCTTGCT CTAGGGGATT
 CCTCTCTCCT TTCCAAGAA ATCCCTCTC TTCTTAGAAG TGCCCATGGG AGGCTGGGAT GTGAAAAGAA ACCATACACA
 AACTCCAGA GCCTTAAAAA AATAAAGCAA CAACCTCCTC CACAGAATA CACTTACAAA ATAAATAGAC GGATAAAGA
 GAGGCCAGT GCCTCCCATC CCGGCTGTAG GGCTGCTTGG GGATAGTGGG GCTGGGTGGC TCGTCCCACT TTCTCCAGC
 CAGGATGATC CAAAGGCTAA ATGGGATGGA AGGGCCCTGG CTTCAGAGA GAGGGTGGGG CAGGCCTCTC CTGGTACTCA
 GCAGGGAGGA CACTGGGGCA CGGCTAGGGG TCCAAGGGCC ACTTAATA

SEQ ID NO:117: (Length of Sequence = 551 Nucleotides)

GAGACGGAGG CTCGCTCTGT CCCCAGGCT GGAGTGAGT GGGAGATCT CAGCTCACTG CAAGCTCCGC CTCCGGGGTT
 CAGCCATTC TCCTGCCTCA GCCTCCCGAG TAGCTGGGAG CCAGCGGCC CAGCCTAAAA AACTTTTCAA GTCAATATTA
 CTACGATTTA ACATTAGAGT GTGGACATGT GATTTAATCG CTATAGCTAA AATACGTCAA ATATACGTTG TCATGTGCTT
 GAACATGATG CTAACCTGA CAGGATGAAG GAAAGTAATA TTCCTTCACT GTAGTTTCAAG AGAGCATTTG TTTTCTTTTC

SEQ ID NO:106: (Length of Sequence = 355 Nucleotides)

GGATGAGGTC GCCGGGATCG TGGCTGCAAG CCACTGCAAG ACCAACATCG TCACAGCTTC CGTGGACGCC ATTAATTTTC
ATGACAAGAT CAGAAAAGGC TGGTCATCA CCATCTCGGG ACGCATGACC TTCACGAGCA ATAAGTCCAT GGAGATCGAG
GTGTTGGTGG ACCCGGACCC TGTGTGGAC AGCTCTCAGA AGCGNTACCG GGCGGCCAGT GCCTTCTTCA CCTACGTGTC
GCTGAGCCAG GAAGGCAGGT CGCTGCCTGT GCGCCAGNTG GTGCCCCGAGA CCGAGGACGA GAAGAAGCGC TTTTAGGAAG
GCAAAGGGCG GTACCTGCAG ATGAAGGCGA GGGAC

SEQ ID NO:107: (Length of Sequence = 273 Nucleotides)

GTGTCTCTTT TAAAGAAAAC ATACTTTATT TTGGTCTAAA TTGTGAAAAT ACCCAAAACA TTTGATAGAA ATTGAACCTCT
GTCAACAGTG TTTTATATAC TAAGATCAGG ACAGTCTCTT GAGATCATAC TGTTTTATTA CTAAGTTTGG CCTTTGTTT
ACAAATGTAA TGTTCATATT TATTTGAAT TTAAGATTGG TTAATGTTA ATGAAAAGCA ATCCAATTGT TANTTTTTAG
TAGTGCTTT TCTCTGTATG CCTTAATTTT ATT

SEQ ID NO:108: (Length of Sequence = 359 Nucleotides)

ATTTTATTTT CTACATCGA AGAAATGTT AAAGAGTATC TGCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCTATCCC TGCAGCATCT GGAATGGAG
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGTTCGAAA GACCACTGCA
CTCAACAGC TGCAGGGCCA CATGTGGAGG CGGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTG CAGATGTAGT
TCCAGCAGTC AGGTAAGTGG AGAGAGGCCG GGATGAAGG

SEQ ID NO:109: (Length of Sequence = 360 Nucleotides)

TTTATNAAAG CAGTTAACT TAGCATTAAA TAACACTCTT TAAATGGTAC ACCTATGAAG CAAGAGTTAA ATATAAACC
AGTCTAATCC TGTACACTTG TGATTAATTG TGACAATCTT AAGTTGCTCA CTCTTTTCCC ATTTACCAAT TCAGAGAAAG
CCCGTTTCTT GTTTTCTCTT CACCACTTTG CCTTGGCATC ACACCAACCC TGCTGGGGC TTCAGCTGCA GATCCTCCCC
AGCCCTCTCT CCCAGCTGGG CTGACTCCAG TCCCAGCCCC AGTCTCCACC AACTGAGCAG CGTACGCAGG GTTGTGTCTG
GCTTCCAGCA TCTACCAACC CTTAGAGCA ACTT

SEQ ID NO:110: (Length of Sequence = 364 Nucleotides)

TCTCAGAGGG GCTCTGGGG TCAATCAAG GGGACTTCTA GCTTCTCTCT GGAACCTTT GTCCAGAGCA AAGCCAGGTT
TCCAAGGTCC CCACGGCAAG GCTGTGGGT GCTGGCAGCA AGAGGTACAC AGCAGTCTC CCAGCTCACA GCAGTGACCT
CAGATCTCCA GCAGCAAGGG CCGCACTCTC GTGCCACAA GGGCCTTGCA GAAATNCTCC GGTCCCTGGG NCTCCCCGG
CAGGAGGGGC GGGCTCTG CTTGCAGTGA GGCCACAGCA CTAAGCGGCT TCAGTCACAT GCTTTTCAGG TGAATCACTC
CAAATTCAGT GAGGAGGGCC ACGACAAGGA AGTTCAGGTA GAAG

SEQ ID NO:111: (Length of Sequence = 455 Nucleotides)

TTTTTTTTT TATATTTTAA ATGGAATTTA TTCTATCAAC TGCTGAGAG GACACAATGG GGGAGGGGCT TCGGACCACA
GCAGGAGCCC CGACTGCCA CCTGAGGGCA GGGAGAGCCT GACCCATTG GCCAGGGCC TGGCTCTGTA ACCATTAAAC
TCTTCCCCCA ACTAACCA ATGAAAACAC CATTCCAGT GACTGGGCTG TGTGTTGCC TCTGTGACAT GGGGACCCCT
GACCCTAGGG GTCTCGCTG AGCCAGACCT GAGGGACCCA CCGCGTAGG ATGGAGGAAG GTTTAGGCCT CCCTTTTGCC
AGCCAACGCC GGGGGTGGG GCAGACCCTG GGAGTGGGCC TTACAGACCA GCCACAGGTA TTTCTTAGGC AATTTGACAC
ATTTTATTAC AAAACCAATC TACATTCATT CCTAAAAGGG TCATTTTCAG TAAAA

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CCTTTTAATA ATAATTCGTC TGCTGCTGT GACTAGAAC CCATGCCTAC TGCTTGGGGT ATAATGTAGT AAATGTAGTA
 AAAACAATAT CGCGGGGG CGGTGGCTCA CGCTGTAT TCCAGCACTT TGGGAGGCCA AGGAGGGCGG ATCAGGAGGT
 CAGGAGAGCG AGACCATCCT GGCTAACATG GTGAAACCCC GTCTCTACTA AAAATACCAA AAATTAGCCA GCGGTGGTGA
 TGGACGCTG TAGTCCCAGC TACTC

SEQ ID NO:100: (Length of Sequence = 333 Nucleotides)

AAAATGCTCA CAGTGGTCTT CTCGGCCCG TGAGCCTACA GCTGATCTTG TCAGAGACAA ACGTTAGTTT TACTGAGTCA
 CCCAGAGCCC TGCTGCTGGT CCTGAGGGTT TGTTCCATGG GACAGTCTCC ACAATTCTCT TGGGGAAGGG CCACAAATCC
 CACAGTGTGT COCAAGAGGG CTGGAGTAGG CGGAGTCCCC AGCAGCTGTG GCATGACCAG CCATCTCTCT CAAAACAATT
 GTTAACAAGC CTCTGCAAG TTAAGGTTCC ACATGGTAGC CGTGGTACAG AGGCATTTCT CTAGGGTGGG AGAGGCTGTG
 GCTCTACACC AGG

SEQ ID NO:101: (Length of Sequence = 156 Nucleotides)

CTCTGACTTT CCTGTGGTIT TAGAGCCAAG CTCAAGGTAG TAGGCOGTAG GGNCITATTT TATTTTCAA CCCCCATCCT
 CAGAGCGCAG ATACATGCAG AGGCTTCTGC CAGGCTACCA CGGGCCCTTA GTGGGAACAG GTTGAGACCA GCATT

SEQ ID NO:102: (Length of Sequence = 331 Nucleotides)

CGAAAAGGGG NNNIATGGCC ATCTTTTATC AGAAAAAGTG AAAAAACGGG AATTAAAAA ATGAATTTTC NNTCTGACTT
 TATTINNA A TACACTTTCT TTTTINNA A ACCAATACAC TTCTTTGAG GATGACAGTA TTAGGAAATC CAATTNNACA
 AAAAATACTA CATCTAGTCT GGGGTAGATA TATTTATTTT TGGTAACATA CATTAAGTGG CACTAATTAC ACAGTAACTA
 TAAGGTAACT AACATGAAAC CACAGAACTG TAACTCTGCC ACAGCTGCAT GAACITGGGC TTTTCTGGTT GAGCCCATTT
 TCAAAAACT G

SEQ ID NO:103: (Length of Sequence = 316 Nucleotides)

AGCCACTGCG CCCACCCCA TTTCGGTGIN ANTCAGCTC ACTTCAACCT ACCCCTCCCA AGTTCAAGTG ATTCTCCTAC
 CTCAGCCTCT TGAGTAGCTG GGATTACAGG GGTCGCCAC CACGCTGGGT GATTTTCTTA TTTTGTAGTG ACATGCAATT
 TCACCAGGTT GGCCAGGCTG GTGTGAAGT CCTGACCTCA GCTGATCCAC CGTCTCGGG GTCCCAAAGT GTTGGGATTA
 CAGGTGTGAG CCACCACACC AGGCCCATAT TTTCTTTTAG ACATGCAGGC AATGTGGTGG GTTTGTCTG TTAAGA

SEQ ID NO:104: (Length of Sequence = 308 Nucleotides)

GTTTTTCCTG CATCTATTGA GATAATCATG TGGTTTTTGT ATTTGGCTCT GTTTATATGC TGGATTACAT TTATTGATTT
 GCGTATATG AACCAGCCTT GCATCCCAGG GATGANGCCC ACTINGATCAT GGTCGATAAG CTTTTTGATG TGCTGCTGGA
 TTCGTTTTGC CAGTATTTTA TTGAGGATTT TTGCATCAAT GTTCATCAAG GATAITGGNC TAAAAGTGTG CTGTATTCAG
 GAAACCCATC TCAGTGCAG AGACACACAT AGGCTCAAAA TAAAGGGATG GAGGAAGATC TACCAAGC

SEQ ID NO:105: (Length of Sequence = 355 Nucleotides)

GGCCTTCCTC AATATGTAGG CGCCACTTTT TCTCCCTGTG CCTCACCTG GTCACCCCTC TGTCGCGGAN ATCCCACTGT
 CTCCTGCGGT GTCCAACTT CCTCTCTTA GGAGGACACA AGTCAGATTG GATTAGGCC CACCCCAATG GCCTCAITTT
 AACTTAATCA CCTCCCTTTT GTTTGGGCTT TTTAACTTAA TCACCTCTTT AAAGACCTTA TCTCCAATA AGGTTTCATT
 CTGAGGTATA CTGGAGGTTA AGACTTTAAA ACACGAATTT GGAGGGGACG TAATTCAGCC CATAACAATA ACAATAATGA
 CATCTTACAA CTTACTGCCA CCACCAAGCT TGCTG

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SEQ ID NO:93: (Length of Sequence = 364 Nucleotides)

GCTTTCAAGG GAACAAAGAA TCGGCTTGGC AGTGCCCTGG AGAAGGAGGT GGAGAGCATG GGGGCCCCATC TTAATGCCTA
 CAGNACCCGG GAGCACACAG CTTACTACAT CAAGGCGCTG TCCAAGGATC TGCCGAAAGC TGTTGGAGCTC CTGGGTGACA
 TTGTGCAGAA CTGTAGTCTG GAAGACTCAC AGATTGAGAA GGAACGTGAT GTGATCCTGC GGGAGATGCA GGAGAATGAT
 GCATCTATGC GAGATGTGGT CTTTAACTAC CTGCATGCCA CAGCATTCCA GGGGCACACC TCTAGCCCAG GCTTTGGAGG
 GGCCCACTGA GAATGTCAGG AAGCTGTCTC GTGCAGACTT GACC

SEQ ID NO:94: (Length of Sequence = 423 Nucleotides)

CTTCATACIA GAACTGTCTG CCATCTTTAT TTCTTTGTTT TCAGGAAAAT TGGAGAGAAA AGTATTTCTT TTTTAAAAAT
 GATTATTATA CTTTAAAGTC TGGGATACAT GTGCAGAACG TGCACTTTTG TTACATAAGT ATACACGTGC CATGGTGGTT
 TGCTGCACCC ATCAACCCGT CATCTACATT AGGTATTTCT CCTAATGCTA TCCCTCCCTC AGCCCCCACC CCTCCAACAG
 GCTCCAGTGT GTGATGTTCC CCTCCCTGTG TCCATGTGTT CTCATTGTTT AACTCCCACT TATGAGTGAG GGACATGCAG
 TGTTTGATTT TCTGTCTCTG TGTTACTTTG CTGAGAATGA TGGCTTCCAG ATTCAATCAT GTCTTGCAA AGGCATGAAC
 TCATCCTTTT TATGGCTGCA TAG

SEQ ID NO:95: (Length of Sequence = 405 Nucleotides)

AACAGCCCC GATCTGCATA GCCTGTGAAA GCCCAGGGG ACATCAGTAA CCTTCTGCAG CCACCATCCA ATGCCATTAC
 TGTAAGTGA GACTTGGCCA CTGTAGCCTG GGCTGTCTGC AGGAGCTCTT CAGAAAGGCA CATGAGGACC ACGGTTTGCC
 TCAGTTTCTG GTAAACACA AGGTCTGGAG TGCCCTGCA AAGGTATTG ATGGACTTCC TGCCAGTGAC AGAGCATGTC
 TATIGCAAAC AATCTCTCA GTTACGTTCA GCACTTAAGA ACGGCTAATG NCAATAGGAT CTTAGCAAC TTTTTCACAT
 CATAGAAGGT GCAATCGCTC ACTTGGGAAC ACTACTGAGA GTGACTTCTC TTTTAAATTT GAGTAGCAGA TGAAAAATTA
 AAATT

SEQ ID NO:96: (Length of Sequence = 173 Nucleotides)

GAAGACAATA CTGATGCCAG CTCCTTGTA TGTGAAATC TGTACCCAA CCTCTGGATT AGAATCTCCA GTTGTCTACT
 GTAAATCTG GAATTACAGC AAAGGATATG GGGACTGGGC TGCTTTTCTG TATTGTACAA GCACTATTCT AGATATTAAA
 GAAATTTAAC CGC

SEQ ID NO:97: (Length of Sequence = 337 Nucleotides)

ATGGCGCCCT ACAGCCTACT GGTGACTCGG CTGCAGAAAG CTCGTGGTGT GCGGCAGTAC CATGTGGCCT CAGTCTGTG
 CCAACGGGCC AAGGTGGCGA TGAGCCANTT TGAGCCCAAC GAGTACATCC ATTATGACCT GCTAGAGAAG AACATTAAAC
 TTGTTCGCAA ACGACTGAAC CGGCGCTGA CCTCTCGGA GAAGNTGTG TATGGACACC TGGATGACCC CGCCAGCCAG
 GAAATTGAGC GAGGCAAGTC GTACCTGCGG CTGCGGCGG ACCGTGTGGC CATGCAGGAT GCGACGGSOC AGATTGGCCA
 TGCTCCAGTT CATCAAG

SEQ ID NO:98: (Length of Sequence = 212 Nucleotides)

TGAAGCCCAA GNAGTNTGTG AAGACAGAGA ATGACCACAT CAACCTGAAG GTGGCCGGGC AGGACGGCTC CTGGGTGCAG
 TTCAAGATCA AGAGGCACAC GCGCTGAGC AAGCTGATGA AGGCCTACTG AGAGAGGCAG GGCTTKTCAA KGAGGCAGAT
 CAGATTCAK TTCGACGGGC AGCCAATCAG TGAACTGAC ACTCCAGCAC AG

SEQ ID NO:99: (Length of Sequence = 26 Nucleotides)

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TCCCCAGGCC TGAAACATTT CTCAGGATTA CTTCTGACCT TCAGCCCCAG CAGGGCCAGG GCGTGGGCTC CTCTGGTCTA
GGATGGGCCC CTTTGGCCAA AAGGGCCTTC AGCTAAGGCG TTGGGTGGG CGGGGAGCCC

SEQ ID NO:87: (Length of Sequence = 280 Nucleotides)

GCCTTTGCTG CTTATTGCGA TCGATGGTGA AAGAGATGTC AGGAGCACTT CTCTGCTGAG GTGGCTGAGA CGAAGAGGAC
TCTGCTGCCA GCGTTGCCGC ATACCTGGCA ATTAGCCTGT GTTCTTCATC AAGCCGGTTT GAACTCTCAA GCATGCTCCT
GGTAATAAAA GGACTTCCTG AGGAGGGAAC AGAGTGNAG AACAGGGTGT CGTTCATGCT GGTTACAGGT CTGGGAGGCA
CGATGTGAGC CAAGTTGAGT GGCTTCTCAG GCTGATCTGG

SEQ ID NO:88: (Length of Sequence = 446 Nucleotides)

CCTGGCTCTC TTACACCCYC TCCACCCGA GGCTCCCCAG AGATAGCAGA GAATCGAAG AGGTGCGCGG GGA CTGGAAA
GAAGTCCNG NAGGCCGCT TCGCAGTCTA CACCCAGCC TGCTTCCAG CCTACAYCCA GAOCAGCTC AGACCTTCGT
GACCACCCCA TCCCTTTCTC CGGCTGGCTG GGTCGGGGG ATCCCTCTCT GTGCTGGCT TCCAGAGGCA GGACAGGCCT
CCTGGTAAGC CGCAAAGTT GCTGACCTCC TGACTTCGTC TGCTTTTAT TAATATCTGT ATTGCTGATA ACCGTGCTCT
TGACTATGTG TCCAGGTCA TGTCACAGT CATGGAGAAG CCCGTGCCAC AGTGACCTT CCATACTTC TGGGGGGGCT
GCTCTCATC TGGATCTAG GAGGATATAG GTGTGTTCTG GACCAT

SEQ ID NO:89: (Length of Sequence = 384 Nucleotides)

GTCCCTCTG GGGACTCTRT TTCCCAATTT ATTGCTGCTG TGTCCTTAC CAGTTCCTTG CAGGATCCC TCCCTTTAAA
ATGCCCTTAA ATCTAGCTTT GCGTTGGAGA CCCCAGTGGG TGCTGCTCCT GCGTTTCTT TCTGCCAAG CCTGAATCAA
TGTTTCATCT CCAACCTCT GCGAGTTTG CCCTCAAAG CTGTGTGGCT CAAGACTGTW AGCCTGGCAG AGCCGCGNGG
TGAAGGAGA AGCTCTTGA GCAGGCAGGA TGCCACCGCT GCTTCAGCTT GCTCCTCGC CCAGCTACCC TTGGGCCCA
TTGGGCCCTC GIMTGCCTCT CCAGGATTGT ATGTTTCAAG NCTTGCTCTG TGTTCCTTG TCTG

SEQ ID NO:90: (Length of Sequence = 344 Nucleotides)

TCAAGCTGGA AAGGGCTACT ACCTCATGCT GGAAAGGGCT ACTACCTCAA GCTGGAAAGG GCTACTACCT CAAGCTGGAA
AGGGCTACTA CCTCAAGCTG GAAAGGGCTA CTACCTCAAG CTGGAAAGAG CTACTACCTC AAGCTGGAAA GGGCTACTAC
CTCATGCTGG AAAGGGCTAC TACCTCAAGC TGGAAAGAGC TACTACCTCA AGCTGGAAAG GGCTACTACC TCAAGCTGGA
AAGGGCTACT ACCTCAAGCT GGAAAGAGCT ACTACCTCCA AGCTGGAAAG GGCTACTACC TCATGCTGGG AAAGGGCTAC
TACCTCAAGC TGGACAGGGC TACT

SEQ ID NO:91: (Length of Sequence = 364 Nucleotides)

GCCCCAGGGT GAGGGCTATG AGGGGTCAGG GGTGAGGTTT CCCAGGACCC TAGTCCTTGT CCCCTTCCCT GGTGCTAAAT
AAAAGTGAAT AAATACTAAA TAAATACAAC TGGGGCCAG GCGCTCCCTG CCTTCCCCCT CCTCCTGTG ACCCGCAGCA
GAGGGGCGAG TTATAGATGA GGGCTGTCTG TCAGCCCCCT CCATCCACTA ACCCATCACT GCGTCCAGG GCAGGAAACC
AGGGCAGGGC CAGCCTGCGC ATTAGGGCAG AGAGGAGGGG CAGGTCTCAC GCGCACAGCC CCTTCCACT TGAGTCTTAG
CATGAGGCAG CAACAGAAGC TCTCTCTTCC TCCCAGCTAA GTCC

SEQ ID NO:92: (Length of Sequence = 218 Nucleotides)

ATTTAATAGA AAATTAAAT AATAAATAAT ATGAAACAGA CTGATAACGC TGAGCTGGG AGGCCAGGC CAGTCTAGTA
CAAAGTTAAG GAGGTAGGA GGATGGTGGG GAGGAGGGG GGGACTACCC TGCAGGACGC GGGAGGCTGC TCAGACTGTG
GTGATGTGAG GAAGGGCCGC AACTTTGGC ATGGACGATG CACTAAAAA AGAGAAAG

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ATGATTTCCTT GCCTGINATA ACCTATGCAC TCACAAAGAT GAACCTCTCTG AGAGGGATGA GCAAGAGCTT CAGGAAATCC
 GAAAGTATTT CTCCTTTCCT GTATTCTTTT TCAAAGTGCC GAAACTGGGC TGGAGATAA TAGACTCCTC AACCAGGAGA
 ATGGAGAGCG AAAGATCACC GCTTTATCGC CAGCTAATTG ACCTGGGCTA TCTGAGCAGC AGTCACTGGA ACTGTGGGGC
 TCCTGGCCAG GGATACTAAA GCTCAGAGCA TGTGGTGGGA ACAGAGTGAA AAGCTGAGAC ACTTGAGCAC ATTTTCTCAC
 CAGGTGTAC AGACTCGCCT GGINGATGCA GCCAAGGCC TGAACCTGG TGCACGCCA CTGCCCTGAC ATCTTTTATT
 AA

SEQ ID NO:81: (Length of Sequence = 246 Nucleotides)

CATTTTAAAT AGAGACGGGG TTAAACCATG TTGGCCAGGC TGGTCTTGAA CTCTTGATCT CAGGTAATCC ACCCACTATG
 GCCTCCAAA GTGCTGGGGT TACAGGTTTG AGCCTCTGTN CCGGCCCGG CCAAAGACTG CCTATTCTAA ACGTGTGTA
 GGACGTGGAN CAATCACAGC TCTCCINICT TTCCAGTGGG AGTTTAACAT GGCACAACCG CCTGAAAACC GTTTGGNGAT
 TTCTGT

SEQ ID NO:82: (Length of Sequence = 394 Nucleotides)

GGGAACCTC AGCAAAATAT AATGGTACCG CTATTATCAG CCTGTTCGA GGCCAGGGA TTTTGGGGGA GGTACAGTG
 TTCTGGAGGA TATTCCTCC TTCCGTGGG GAATTGTCTG AAACATCAGG NAACTGACA ATGCGAGACG AACAGTCTGC
 AGTCAITGTA GTAATACAGG CTTTGAACGA TGACATTCCC GAGGAAAAA GCTTCTATGA GTTTCAGCTC ACTGCAGTCA
 GTNAGGGAGG AGTTCTGAGT GAATCCAGCA GCACINCCAA CATCACGGTG GTGGCCAGCG ACTCTCCCTA TGGCOGATTT
 GCCTTTINAC ATGAGGCAAC TCGAGTGTG AGAAGCACAG AGGNTAACA TCACAATCAT CCGTCCAGT GGAG

SEQ ID NO:83: (Length of Sequence = 308 Nucleotides)

ATAAGACCAT TGGCAAAGG AGAATTCATG AACTGAAAGA TCTGAAGTAA TTTCCAGAA TGTAATGTTA AGAAATAAGT
 TAAAGGCAG AGCATAATGA GTCTAACATG TGTGATTGAA GTCTTATAAG GAGAGAATTA AGAMCAGGCA ATATTTTAAA
 GGRATAATGG AGAAAATGGA ATAATTGATG AAATATGTGA ATATATATAG GGACCATATG CATATGAMGG CCGGGGGTTA
 AATAAAACGA AATCTACTTG TACATACITT ATGGGATTCC TGCAGCCCGG GGGGATCCAC TAGTCTTT

SEQ ID NO:84: (Length of Sequence = 313 Nucleotides)

CTTTAACTTA ATGGCAATTA AACTCACTG GCAAAAAA TCACTAGAGA TGTGAGTCCA TTATCTTACC AAATAGTGT
 TTTTACCAT CTTTACCTA CACCTTGAG TAAGGTGGAA TAGGTTAAG TTACTGGCAT AATAACACTT CATTGAATTC
 ATGATAGTAT TTAACATGTT AAACTGTTT AGTTGAAAAG TTCACATGCA ATTTATAATT TAAAAATATG CTACATATAT
 TTCATAAAW TACAATAGGT CATACTARAC TTGACTAAA ATTAAGAATG TKTTCTKTC ATAATAATGC AGG

SEQ ID NO:85: (Length of Sequence = 303 Nucleotides)

TGCTCOGTTT ATTGCTCTAT TCAATGACCA CGAGCGAATT ATAAAAAGAC ACCAAATGTC TCTGTCTGCC GTGGGATAAA
 TATTTAAAGT CAGCAATAAA GTCACGTGGC TOCAAGRTAA TACATGTTGC CAAAGAGTCA TGCA TGCCCT CCTGATGGGC
 TCTCAACACA CGTATGGWCA TGGGAACACA CGCAGAGCAA CACGAGTAT GAACCTSTGG GAAGGCTTTA CCACAGTGAC
 ACAGTAAAAT GTCTCAGTA GATCTGRGCT GAGTCCCCAC CCAAACCTTG AGCTCCCTTT CCA

SEQ ID NO:86: (Length of Sequence = 380 Nucleotides)

AAAACAAACC AGCTTTAATA CCAATATAGT TCTCTCTTAA ATACCGTGT TCCAGGACA AATGCAGGGG CAGGCTCTTG
 GCAGAAAGAG TAGAAAGGAA ATGTGGAACA AAATGGAATG GATGGCCAG GCCAGGGTC CCTGCCTTGG GCACTAGGGA
 CTGGGCTGCC TCGGGATGG GGGAGTGACA GCAGCTCCCC CTGGTCCAGT TATTGCAGAG GCGTCGGGGG CTCCCTCCC

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GTGCTCAGTA AATACAAATT GGATGGACTA GAGAGATAGC CCGAGGACA CTGCCAAATA AATAACAAAT TGTGCAAGCA
GCAGGCOGCT GTAATTAGAC CAAGGAGGAC AGTCAGTTAT TAATATCAGA CACGTGGCAG GGTTAACAGC CACTGAGGGT
GGGTACAATG AAGAGAGTCA CTTTCTGCAC CCTCAGGAC TTCCCTTGTC ATGGCCTTCT AAAGAGGGCT GAACAGCACC
AAGTGCCTTC GCTGCCTCTG GTTCTGCTG CCTCCGCGT GCCTTGGGTG CCCCACT AGGGCCCTGG GTCCCTCCCA
TGTCCCCCTC CCTCCTACAA CCCCAGACC CCTTATCTGG CCAGCCATTA TGATGCCTAT CAGTATGAGG CCAGATGAGA
GT

SEQ ID NO:75: (Length of Sequence = 454 Nucleotides)

GGACCCGGG CCGCGATGT GGGCCAGTAC CTGCTCTCAG ACAGCCTCTT CGTGTGGGTT CTAGTAAATA CCGCTTGTCT
TGTTTGTATG TTGGTGGCTA AGCTCATCCA GTGTATGTG TTGGCCCTC TTGAGTGAG TGAGAGACAG CATCTCAAAG
ACANATTTTG GAATTTTATT TTCTACAAGT TCATTTTCAT CTTTGGTGTG CTGAATGTCC AGACAGTGA AGAGGTGGTC
ATGTGGTGCC TCTGTTTGC CGGACTTGTG TTTCTGCACC TGATGGTTCA GCTCTGCAAG GNTOGATTTG AATATCTTTC
CTTCTCGNOC ACCACGGCGA TGAGCAGCCA CGGGTGGAGT CCTGTCCCTG TTGGTTGCC ATGCTGCTTT TCTGCTGTG
GACTTGGGCG CGTTGTCTA TTACCGGGTA CACCAAGGAA TGCACACCTG GCTT

SEQ ID NO:76: (Length of Sequence = 313 Nucleotides)

GCFTTGTATG CTAGTTGTCT AAAAGTGTG NITATTAAT AATCCACCTN TTTCCCCACT TAAACATCC CTCTTACCAT
ATACTAAAT CCGTLAGCC TGGGTCTGTT TCTGACTCT CCGTCTGTG TGACCCCTC CAGGTACAC TGAGTGAGGT
AATGGTGGG TGAGAATCT CTGGGAATCT GGCAGGNTCA CCCNGAGCA GTCCACCCN CACTCATTA NCATGTTCA
GAGTGGNCTG AGTGTCTCA CACATTCAT CTGCCAATG CACTTTAGGA ACTGTCAAAT TCCAAAGTTT CAA

SEQ ID NO:77: (Length of Sequence = 446 Nucleotides)

CTCAGCCGTA GCGCTAAGTC GTTTTTCOA TTTAGGAAGC TCACAACGCA GATCTGCATT GTACGTACC AGCTGTTTGT
GAACCTTTGT AAGCTGTTC AGGTGTCTT CAAGAAAGGA AATCTTCTGC TTTTGGGAGT GAATCCCCC ACTGTCTTGG
GGCTCCATTT CTGCATTTT CTGACTCGA GTGTGAGCT CTGGAACGAA CAGCTTGGGA AGGTGTGGG SGGTCTGGAG
TTCCCGGGCA ACTGTCTCTT CCAGACCTT GAGGTCTGC TTGTGACTGC TCAATGTGTC TGTACAGAA ATGTACGCTC
CTGCAGCTTT GTGTCTCTT TGTGGTCTT TGGCTCTTC AGCTTCTTC TAGTCAAGCC TGAAGGCTTC TCTAAGCTCT
AAGTGGAGCT TCTGATTAA GTCTTTTGA GCTCATCAA TGGTCT

SEQ ID NO:78: (Length of Sequence = 296 Nucleotides)

AGCCGGTGGC GCAATGGAGA GAATGTGCCT GAGACAGAGC GCCTGGCTGG GGAGGAGGCA GCGCTGGNG CCGAGCTCTG
TGAGGAGACC CCGTGAATG ACAAATCATC CATCGTGGTG CGCATCGGC CCGAGGAGCG GCAGAAATAC GAGGAGGAGA
TCCGCGTCT CTATAAGCAG CTINACGACA AGGATGATGA AATCAACCAA CAAAGCCAA TCATAGAGNA GCTCAAGCAG
CAATNCTGG ACCAGGAAGA GCTGCTGGTG TNCACCGAG GAGACAACGA GAAGGT

SEQ ID NO:79: (Length of Sequence = 285 Nucleotides)

CCTTCTCTG CTGGGAAGTG ATGACTCCA GGTGGGCTT GGGCTGGG GCTCCAAGCT GGGTCTGTG GGTAGGTGGG
GGCGGAGACT TGGCAGGGAT GACCTGTGTT AGGCTGTGTC CATGGCCAC AGGGAGGAGG CCAGGGGAAG CCCGAGCACT
GACGTAGCCA TTCCAACAG GGCTGGGCA GGCTCGTTA GCACTGTTC GGTCAACNCC CAGCATGGCC
CCCGCACTACGCTG GGGCAGGCCA GGAGACACAC TGTTCCTCTG TAGTG

SEQ ID NO:80: (Length of Sequence = 402 Nucleotides)

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AAGTGTAGGC AATTTTACAT CATCTTTTTT CCCAATCAGT TTGTGATCCA ACTATAAAAA GGAGACATAG AATACTGAAT
 AAATGAAACA GAAACTCCAA GGCCAAGAAG TGCCATCTT GAAAGAGTGT TAGTGGCAAG ATATGTGACT GCAGACTAGA
 TGTAGACAAA CCTGAGAAAA ACCAAGCATG GGGGAAAGGA TYCCTATTTT AATAAATGGT GCTGGGGAAA ACTGGCTAGC
 CATATGTACT TTA

SEQ ID NO:68: (Length of Sequence = 372 Nucleotides)

GCACGGTTAA AAGACCAACG TGTGTGNTC AAATATAAAG GCCACACCTT TCAGACCGAA CCTACTCAA GATCCTTTAC
 TTTGCAATAA TTTGAACITG AGAACCAAAG ACGGGAGACG AATGAAAGCA AAGATGCTCA AAGAACCAAA GGAAAGACCT
 GAAGGAATCC ACCTGATAG GCCACGCGTT CCACTCTGGG TCAAATGCTT CCACGATGCA GAAACCTTTT TTTAAAAAAG
 TGCAAGTCTA ATTACCTACC AAGGGTAATA AAAAGCACAG CACAGGAATG ATTACAGCTG ATGGTCAAAA AACAAACCAA
 AACCATTAAA AAAACAATCA GGCAGAAAAC AGGAGTTAAA TGTTTACATA TG

SEQ ID NO:69: (Length of Sequence = 389 Nucleotides)

TCTAGAACCT GGACCCACCC AGCGGTCCT TTCITATCCC CGAGTGGATG GATGGATGGA TGGATGGTAG GGATGTTAAT
 AATTTTAGTG GAACAAAGCC TGTGAAATGA TTGTACATAG TGTTAATTTA TTGTAACGAA TGGCTAGTTT TTATTCTCGT
 CAAGGCACAA AACCAAGTCA TGCTTAACCN TTTTTCCTT TCCTTCTCTT GCTTTTCTTT CTCTCCTCTC ATACTTTCTC
 TTCTCTCTCT TTTAATTTTC TTGTGAGATA ATATTCTAAG AGGCTCTAGA AACATGAAAT ACTCAGTAGT GGATGGGTTT
 CCCCTTCTC CTCATCCGT TGCATGAAAT AATTACTATG GTGCCCTAAT GCACACAAAT AGCTAAGGG

SEQ ID NO:71: (Length of Sequence = 329 Nucleotides)

GAAAAAATGG GAGGGCAGCC ATGTATTAAAT TGTACATCCA AGGAAACTGT GCGCCAGGGG TCTTGTTGT ATTTCTGAGA
 AGAGGGGTGA GAAAAGGCAC TGTGTCAACA TTGTCTCTG CCTGAACGTG CACCTCCAG TGCTCCTCCA TCAATTAGGA
 GAACGTCTT GAAGAATGCT GCCTCAGCTT CTGAAGAGAA GACCCAGGA CATGCATTAA TGAGAGGAGG GGAGTCACAG
 CTGCAGAAGA ATAAAGCTCT CTGAGGGAGC CTGGGNGGCC CCAGTGGAGG CCRGAGCTT GTTGACCANN GCAGCAGGAG
 ACCCTGCT

SEQ ID NO:72: (Length of Sequence = 418 Nucleotides)

CTGAGTGGC TGAGGTCAAT CACATGCTTC AGCACCAGTT CCCATCTGTT CAGGCAAATG CAGCGGCTTA CCTGCAGCAC
 CTGTGCTTTG GTGACAACAA AGTGAAGATG GAGGTGTGTA GGTTAGGGGG AATCAAGCAT CTGGTTGACC TTCTGGACCA
 CAGAGTTTTG GAAGTTTACA AGAATGCTTG TGTGCCCTT CGAAACCTCG TTTTGGCAA GTCTACAGAT GAAATAAAAA
 TAGCAATGAA GAATGTTGGT GGGGATACCT GCCTGTGTG GCGTGTGAG AAAAATCTAT TTGATGCAGA AGTAAGGGAG
 CTGTGTACAG GAGTCTTTG AATTATCCCT CATGTGATGC CTGTAAAAAT GACATTCAAT CGAGATGCTC TCTCAACCTT
 AACAAACACT GTGATTGT

SEQ ID NO:73: (Length of Sequence = 336 Nucleotides)

CTGAATTTTT ATATGCTTCA CTTAGGCTTT CATTGAGTA GACTCTAAAA ATTCTGCCIT GCTTAAGTNC TAACACTGCC
 TCTCAGATTT CAGTTTTGGA CATTGCACAA CTAAGACCTT TTAACGCAT TTNCTTGCTA ACTCGGAAGA CACATAGTCT
 GCAGCAAGAC ATTCCTATAT TGAAGAAATG AGAGAAAATT TTATGCTGCA TCAGGTGGAG AGCAAGGCTC AACGGTGGTT
 GCATTAGTTC CCTCGGAAGT ATTGAAAAAN CTTTGAATG GGAAGGAAAA TTTTGTGCAC CTAATGTTCC TGAGGTACCC
 AGAATGTCTG GGGGTT

SEQ ID NO:74: (Length of Sequence = 402 Nucleotides)

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AGTCTCTAAG GGCIGATTCC AACTTCCCTG TCCAGGGACT TTCTCAGCAA ACTTTGTTC TGAAGCAGTTG TTGCTTTTGA
TGGTCTTAGC CAGTTTTTGG TGCAGGGGTG TTCTCTGGT ACTAGGGCTA GGGCAGCTGT TTAAAG

SEQ ID NO:61: (Length of Sequence = 491 Nucleotides)

GACACCCCTC CTGCCATGAA GAATGCCACT AGCTCTAAGC AGCTCCCACT GGAACCAAG AGCCCCCTCAG GGCAGGTCCG
GCCTAGGCCA GCGCCCCCGC AGGAAGAGTC CCCTTCTCTT GAAGCAAAGA GCAGAGGACC CACCCCACCA GCCATGGGCC
CAOGGGATGC CAGACCTCTT CGAAGGAGCA GCCAGCCATC TCCAACAGCA GTGCCAGCCT COGACAGCCC TCCCACCAAG
CAAGAGGTGA AGAAGGCAGG AGAGAGACAC AAGCTGGCAA AGGAGCGGCG AGAAGAGCGT GCGAAGTACC TGGCGGCCAA
GGAAGGCAGT GTGGCTGGGA AGGAGGAGAA AGGCCAAGGT GCTGCGGGAG GAAGCAAGCT CCATGGAGCG COGCTGCCGG
TTTTAGGGAG CAAACGTCCT AAAGCCGAGC AAGCCCGTTC AAGCCTTGGG GGAACGGCTA GCGGAAGAAG TTTGTGGAAA
ACAAGGGGCG T

SEQ ID NO:62: (Length of Sequence = 478 Nucleotides)

ATCATTGAGT ACGCAGAGCT CAAACAGAC GTGTTCAGA GCCTGAGGGA AGTGGGCAAT GCATCTCTTT CTGCCTCCTC
ATAGAGCAAG CTCGTCTCA GGAGGAGGTC TGCGATTTC TCCATGCCGA CCCTTCCAAA ACATCTTGCC TAGAGTCTAC
ATCAAAGAGG GGGAGCGCCT GGAGGTCCGG ATGAAACGTC TGAAGCCAA GTATGCCCGG CTCCACCTGG TCCCTCTGAT
CGAGCGGCTG GGGACCCCTA GCAATCGCC ATTGCTCGCG AGGGTGACCT CCGACCAAG GAGCGGCTGT CTGTGGCTGT
CCATGTTTGA GTTCATCTG ACCCGATTG GAGCTACCTT CAGGACCCAT CTGGCGGGGC CACGCCACC AATCGTATG
ACGTGATGA GTTTTGTAGT TCACTGCTGT GAGCGCATGA GTGTGTACT GAATCTGTG GACAACGGTT AAGTTACA

SEQ ID NO:63: (Length of Sequence = 183 Nucleotides)

CCTGGAAAGT GGGGGTGGC CAGGGGCCA GGCCAGCAT GCACCCCAT TTTTGGGG GCTGATCCCT GCCCAGCTC
TGCTGATACC CGGGCCACA GGTGAGGCC GTTGGGGGTG GAGTAGAGG TGGGAGACA GGGGAGAGG CCTKAGGAGC
CACAATTGGG CAGACAGAAG CGG

SEQ ID NO:64: (Length of Sequence = 316 Nucleotides)

GGATATTGCA CCTTACAGAC TTAGGAGGCC TTTACCAGAG ACGCTTAAA CGCCCCAGT TCAGCCATTG TGCTGAATAG
AGTGAATAT AGAACCAGG ACAGAGTAT TCAATTACG TTGATATATA CTGTCTAAG AAACACTAAC AATACTGTAA
CTTTGTTAA GGACATAGTA TTGAAATGG AATAGAGGT CAGGCTACA TCATCTTAGT TTAATGCTGG GCACTTTTT
CTGATTTCTG TAGTCCCTG GAAATGTGT CCTTCGTACC CATAAAGTG TACAAATGA TTTGTAAACA TTTTGG

SEQ ID NO:66: (Length of Sequence = 411 Nucleotides)

ATCTGGTCTA GAGAGGCGAC TCCAAGCTCT CTGTCTGGCT CCCAGCTGTG GGAATCCCTT AGGCTGTTC TCAACCTACA
CGTTAAAAAT GCTTCTGGT GTGTTTGGG AGGGGAGAG GGAACTGAG CTCTCTCTG ACCTCCTCCA ACACCTTGA
CTTGCTTACC CAGCCATTTT CAGTAGCTAC ACGGTGCTC ACAGAACTT GGGGGGCACT CGGCACACAA CACAGAACC
GGGAGTCCA TGCAGGTGCG GGAACACATG TCGGACCCAG GGAGCAAGGA ACACGCCACC CCGAGGAACA TGCAACCGA
GGAAGGATTC CCTTCAGATT CCAAGGATG CACAACCCG ACGGGCGCT TAGGGAGGCA CGATTATCT AAGGAAAAAG
GCCACTGTTT G

SEQ ID NO:67: (Length of Sequence = 413 Nucleotides)

CIGCTCCTTA TGTMTTAT TCCAAAGTTT AGAATTTCTT TGCTTCATAG TATTATTTA TTTTACTAAA TTACAGAGTA
AGAAAAGCTT TTCATTTTAT CTGATTTTAT TCTTAGAACA AAAATATTAC GATCTTCTAT ATTTTGTTC TTTTGCCAAA

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SEQ ID NO:54: (Length of Sequence = 310 Nucleotides)

AAGCCACCGC ACCTGGCCCA TTACATTAT AATGTTATAA GGGGGTGTAG GGGTCGTCCA CTGGAGCAGT GGTTCCTCAA
 CTCGTGTATG CATAGGAATT ACCTGAAGGG CTGTGTAAAA CACAACTGC AGGGCCACC CCCAGAGTTT CTGGTTGGGG
 AGGTGTGGGC TGGGCTTGAG GATGTGAATC TCTACAAGC TCCCAGGTGA GGCTGCTGGT CTGTGGACCC ACTTCAAAGA
 CCCAGTGAAT CAGAAGAGTC AGTGAGACTG GACAAATGAA CGCAAGACAG TCTTCAAAGG AGACCAGAGG

SEQ ID NO:55: (Length of Sequence = 252 Nucleotides)

TTTTTTTTTT TYCCGGGGAR GTCAAACATA CTTTTTCAAC ATAGGATKTC TGACAGGAGG CCCTTGGMCA GGGTTCCTTG
 ACCTCTGYTT CAAACCCAC TGGAAACAGA GCAAAGTCAT CAMGAAAACC CAGGACACCA GGGCAGGGGG GCTGCACAAG
 GTGGGTAGG TCACAGTGGG CCAGCACACA GTGGCCCCGC CCAGGTCCAG CCCAGCCTGG GGGAGGGTGT GAGGGTTCCA
 KGCAAGCTCA TT

SEQ ID NO:56: (Length of Sequence = 188 Nucleotides)

GTCAAGTCTA CCATCATCTT AGAAGGAAAA GGCATGGTGG GAATTCAGCA CCTGAAGTGT TATTTACACC AGCCTCGGCA
 TCTGGCAAG RAATAGCGAT TGTTCAATAGT GATGCAGAGA GAGAACAGGA GGAKGAAGAA CAAATACACA CAAACAATG
 ATCTAGGGAG ACTCCAARGA TCCAACAG

SEQ ID NO:57: (Length of Sequence = 304 Nucleotides)

AATCAGCCTG CAAGCAAAG ATAGGAATAT TCACCTACAG TGGGCACCTC CTTGAAGAAG CTGATAGCTT TTACACAGTA
 TTAGATTGAA ATAATGGACA GAAACACATT CTGTCAAGA AAGGGGAGA GAAGTCTGTT TGCAAGTTTC AAAGCAAAAA
 GCAAAGTGA AATGATTGA GGAATTTCTG TCTAATTGA GATGATTCTC TGGTGTGTAG AAATGGCAA TATTGATGAT
 TGTTGTCTAT TGATTGGTGC AGGATACTTG GTATACGAGT AAATACTTGA GACTGTGTCT ACTT

SEQ ID NO:58: (Length of Sequence = 261 Nucleotides)

CCAGAAGCTT CTGCTCTCT CTGTGCTCTC AGTGGTTCCC TTCCCTGAAG TGCTCCCTT CTCAITTAATT ATAGCCTGTG
 TCTGAACATT GTGAGCTATA AGAACCCTCA TATTAATGGT TAAGGGACTG TTGGAAATGA TGTGATTTTA TTAATAATGG
 GGTCTTTGTG GAGGAGTCAG GAATGGTCAA AATGAGCTTC AGGTATGGGG CTGTGCTCTT GCTCCTGATA CCAAGGGTCT
 GGCAAGCACA AAGGAAGGTG G

SEQ ID NO:59: (Length of Sequence = 470 Nucleotides)

AATACGTATT CTGAAGCCAC TATATCTGCA TATGTATCCC AGATTGAAC AATTAAGTAA AAAGATGGTG AATGATGAAA
 GCCAGTTTTC TGTCTGTAGA AGTGAGAGGT GACAGATAAC CAAAGGAAGA AGGCTAGAAT GGATAGAGGA CAGTGCTTAA
 GTGTAGTTCC TGTGCTCTT AGTCTTATAG ACTTCATTTC CAAAGTTTCT TAGCACCCC CTTCCTCTT TGGTGAGGTT
 GTTTCACATA TTTTCTAGAC AATTAGATTC TTTGTCAAA GTCTGTGTT CATCCGAGA GCCTCTGATC TCTTAAATGA
 TTTTAAAT TTACATACAT TAAGGTTTAC TCTGCTGTAA AGGTCTGTGG GTTTTAAATCC TGTCTCACAG TTTTGCATA
 TGTGCTCTT CTGCTGGGA ATACTCTCCC AGATATTCCC CATGACTGGC CCTTATCTT CAATCAGATC

SEQ ID NO:60: (Length of Sequence = 466 Nucleotides)

GTGTTTCAAG GGAAGGCAAC TMCAAGTTTG TGCAAGTGAA TTTCTGTAAA GTTAAGACAG ACTCAMCTTC TCATTCAATC
 TGGGGCAGTG GATAACCTTT CTGAATAGAC CCACTTGTTC ACGGACAGGG ATAGAGGTTT GCCTTCTTTC TTTCTTGAA
 TTTGGAGTGA GCACTAGGGA GGGGAAGTGC ATGGGTGACA TGAAGAAGGT GAAGATGTAG TAAAAGCATC ATCCAGGTAC
 ACATTAAACG TGCTGCAGAA TTTTCACAAT ACAACTGAGG GAGTCTGTAG TGGCAAAAGC AATTACTGAG CACAAAAGCC

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GATCTCTTCC AGCGTCAATG TACTGGGACA GCAAACACTC ACATTGAAG TTCTTCTGG CCACCGGCTT CCCAGTACAT
TGACGCTGGA AGAGATCATC TCAAATGGTT CTCCAGTGTG AGGCTGGAGA TCTCCAGAAA TGGAGTCTAC TCTGGGGTG
GCTGTATGG GAGCC

SEQ ID NO:48: (Length of Sequence = 270 Nucleotides)

GTCGTGAGA GGNACGGGC AGCTCAMRCC CACAGGGCT CCTCATCTC TGTGGTGGCA TCTCATTC ACTCTCATCT
GCCACCTKCT CAGGCGGGCC TCTAGCTTTC TCATGTACTC TAGCAATTCC TGTCTCTCCT GCTGTAACTG CTCCTTTTCC
TTCTGGAGCA CACGCGGGC TGACCGCAGC TGTGTAGCT TCCGCTTACT TIMTGACAAC TGTACCAGGC TAGAATCCTT
TCTGCCTGGG TCAGCTTCAG TCTTTGAACA

SEQ ID NO:49: (Length of Sequence = 359 Nucleotides)

CCCTGAAGAG TGGGTGGGAC AACCAGATGG GTGTAACCCC TTGTGGGGGA AAAGGAGTGA GTTTACTTGG TAAAATAATA
ATGTAATGT CAGCAGCGTG GCTGGGGGAC TCAGTATGTT CCGGGGAAA GAGTGGGGC AGTGAACCTC CCAGGCGGAC
TGGCCTTGGG CTGGCAGCAG GGAGGCTGCA GGGCGCTAC CTMCTCTGCC ACGTCCCTGC CTAGGAAACC TATCCCAGGA
CACCTGCTT TGGCTGGAT AGCAGCTAG GGATGAGCAT TTCTTTGAAA GCAATTAGGT TATTCACCTG GTATTAAAC
TATTTACTGT TAAAAATCT GTGACTTCAT GGAGTGGG

SEQ ID NO:50: (Length of Sequence = 271 Nucleotides)

CCAGGAAGGA CAGGAAGTGT CCTCTAATAC GCATAAGATC CAGTACAGGA GAGATGGGAA GAGAGCTCC AGGATGAAGG
GGAAARAGG CGCATGCCA GTCACCTGGC ATCTNCCAGA GAGGGYAGY CTNCCACTG AGACTGGGGC ACGAGTCCCG
TCATCACCAT GCCCTCTGAC TGTGAACTG TCTTTTACC TGACAAATAC TACACAGGTA TCGMTGTGG CCATCTCTG
CTATCTAAC CCAGGAAGT ATTAGATTGT T

SEQ ID NO:51: (Length of Sequence = 226 Nucleotides)

CTCCAAGCAG TAAAGACTTG CAAAGCATG CATTTTGATT AAACCTTGCT GGGCTGAAGG GCAGGCAGAG CTGTGGTGGG
CACTGGCAGG ACGCAGCACC CCCGACTGG CCCTTGGCAG GCTGCACCGG GCGCATCGG GTGTGGGCCA GGGTGTCTT
AGGAAGCAGG TGGGAGTCTK NCACGTGCAG KCGTCCAGG AGKGYACCAK GCCTGGCAGG GCACTG

SEQ ID NO:52: (Length of Sequence = 408 Nucleotides)

GGTGGGGCAA GGTGGGGGTG AAGTGCACTC CTGCTGCATG AGTGGCAGGG CAGGGTGCAC ACACACAGT GGGIMCTGGC
TGGGTGAGGC AAGCAAAACC TGCTGCACA TGGCAAAGG ATGTGGGAAG TATCCATGGG CNCCAGGGGA AGCTGCAGTT
TGGGAGGGA ATGGGTGGCA CTGCTGCGTG TCTGTGGGG CCACCCACT GGGGTCTCC AAGTGGTCAA GTTCCGTCTG
CCAGTTAGA AGCTATGATG GGGGCTCTA GGACACTNGA GGTGACCTG AAAGCAAGGT ACTTTTACA CTGGGACCT
GCAAGAGGCC AACAAGATTA AGGGATGCTT CAGGTGAGC TTGGCCCTCT TCTTATGGG CAAGACCTTC CCGCAGAGT
TCAGATCT

SEQ ID NO:53: (Length of Sequence = 314 Nucleotides)

TTCTGTGAG GAGGACCACA TGGCAGTCCA GCAGACTGCA CATTTTAAA AACTAGGTCT TCCAGGTAG TTTGAGGAGC
ACCAGGGCAC ACTCAGGGA GGGACATGTC AGTGTCTGAG AGCTCACGGG AGGAAGTGT AGTGACAACA TGGACCATGG
TGGAGTACT TTAGACGCT CTGGGTNAG GAGAATCATC ATGTAAACA GCATTAAATC ATTTGGAGAA ATTCAGAAA
NTCGTAGATG TACATTCTAG CCCACTTACC AGGCCTACTA AACGTCAATC AGATATATTT CAATTGGAAT TCGG

SEQ ID NO:39: (Length of Sequence = 303 Nucleotides)

GCCAAAAACA NYTCTGAACC CGTTTTGGGA AATAATGGGA TTCCTTGATC ACGGGACAAC GAATCACCCCT GAAGTTTTTC
 TCCAGTTTAC TCAGTCACAT AAGCCACCAG AGGCTAACCA CACTGACAAC AAAAGCAAGT CCCAGGATTC CGGGGGCTAA
 TACCATGCTA GGCATTACTT GGGAGTTAT GAGTTGGTAT ACATCTGTGA ATTTGGTGGG AGGAGAAAAC TAACAGTAAA
 TTATCAAAG CCAGTGGTAC GTTCAGCGTT ATAAAAATTA CAAGGATCTG CTTCTCGGCG ACT

SEQ ID NO:40: (Length of Sequence = 178 Nucleotides)

GGTGTCGGGG GCTAGAGATA CACATGCCAG TNCATACAT TTCTCAGCAC TGTGCTGTG ATTCACAGCA GTTCAATTGT
 TCATGCGATA TAAGCCAGTC ATGTGGCCCA AGTTATTCTG TCGGCTGTGT TCTCTGCAGG AATCTGATGC AAGAAGGCCT
 GAAGGATGCA TGGCTTTT

SEQ ID NO:41: (Length of Sequence = 322 Nucleotides)

TGCCTTTCIT TAGAAATTIA GGCAGTGTG ATGCTTCCAG AGGTCTGTAC AAACACCAGC TTTCATTGTG CTGGGGAGTT
 TCCATGCCTC TYCCTTCTCT TCGCTTAGTG CAGGTTTCTG CTTTTTATCA GTTTGACTGC CTGAGACTGA KTCCAACAAC
 CCAAAGTGAA CGCTCAGCTC CTCTTTTCA AAGGAGGATG ACTTNTCTNA ACAACTATTT AGGTGAATTA TTKCKACAGT
 TTATTAAGC AATGGCTCTA AACAAATTCC ACTGGGGGTG ACAAGTACA ATACAAAAGG CGTACTCTGA GGGCTTGGGG
 GT

SEQ ID NO:42: (Length of Sequence = 278 Nucleotides)

AAACTTTGGC ATTTTTATTG AGACACGTAT AAAACAAAA CAAAAACTT CAGTGATACA ACAGACGTTT TCCCTTAGTT
 CCCCATCCAA GGGGACAGAG GTGTGCAGCT GAAGCTGGAY CTTTTTCTG TCCTACCTGG AAGCTGTCTC ACTGCTGGAT
 GAGAAATGGCT TCTAAAAGTG GATCTTGGGG ATCCTTGTA ATTTGCCCTC GGATAAGGAG TGAAGWTCAT TTACGGCACA
 TGTGGATTAT GGTTCACACA AAGATGTCCA GTTATTTT

SEQ ID NO:43: (Length of Sequence = 225 Nucleotides)

AGATCAAAAG ATGAGAGAAG CTGAAACAGA ACCGCATGAG GGAAGAGGA AAGTGAATC TCTGTGGCCC ATCTTCAGGA
 TCCACCACCA GAAAACCGT TACATCTTCG CCTCTTTTAC AAGCGGAAAG CCAGCAGCAG GATCTCTAGG AATATTAGTA
 TTAAGAAGG CTATGCAGCA TAAACCTGAT TTCAAAATGG TAAAGCAAG GTTATGTGTA CTGT

SEQ ID NO:45: (Length of Sequence = 305 Nucleotides)

GGATTGCCAG GAGCTGTTC AGGTTGGGGA GAGGCAGAGT GGACTATTTG AAATCCAGCC TCAGGGGTCT CCGCCATTTT
 TGGTGAAC TG CAAGATGACC TCAGATGGAG GCTGGACAGT AATTCAGAGG CGCCACGATG GCTCAGTGA CTTCAACGG
 CCTKGGTAG CCTACAAGGC GGTGGTTTTG GGGGATCCCC ACGGCGAGTT CTGGCTTGGG TCTTGAGAA AGGKGCTAG
 CATCAGGGG GGACCGGAAC AGCCGMCTGG CGGTGCAAMC TGCGGGGACT GGGATGGGCA AACGC

SEQ ID NO:46: (Length of Sequence = 264 Nucleotides)

ATGAAATAGC ATATCINNGC CTAATTAAAA GATTCCATTA CATTACTTT TATCATTTAT ACTGCCAAGG ATCAGTCACA
 AAAAATTCAA ATTATACATA TTATTCATGC TTTAATTICA TAAATAAGTA AATTAAAGCA AGCCAATATG TCTCTCTCA
 TAACATAGGG AAAAATTACT GTTTAGCATA ACAGNGTAAT AGGCAAAGTC TAGCCATACA GCAGCAGTTC ACGGTGTTGT
 CAAGTTGGKA CAGGTTCCAT CGAT

SEQ ID NO:47: (Length of Sequence = 175 Nucleotides)

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ACAGGATGGT CAGGACAAGC CACCTCTGGT AAAGTGACAT TTGAGANGAC COCTGAAGGN GGGGGTTGA GTCATGTGGA
CATCTTGAGG AAGAGTTTAC TGGCACAGGG AACTGCAAGG KCAAAGTCCC CAAGTACTAG GGCTGGGGGC AGT

SEQ ID NO:33: (Length of Sequence = 257 Nucleotides)

TCAGTCAGCT TATCGCAGGT GCAGCCAAAC ACAAGCTTC AGGACAAATT GTACAAACTT TACAAITGTTG GATTTAAATT
TAAAATATGA TACATAAAAA TCTACACAAA ACTGATAAAA ATCAAGCACA GNTACCAGGA TTGAAACTTA TAATAATCCA
TGTGTGAAAG GGAGTCTTGT TTCCTTTCAA GTGCTTTTAT TCTGCTATGG AACAGTCAAA ATGGAAGNTG TAAAGCTTTG
TGGTTAGTTT AAATTAT

SEQ ID NO:34: (Length of Sequence = 307 Nucleotides)

CTCCCAACCA TATCTAATCC AACAGTCCA GCTGCCTCTC TCINAAMAAT ACCNARGATC AGGCCCCCTTC TCAGCACCCC
CACAGCTGCT GCCCCAAAGG AAGCCAGTC ATCTCTCAG GAGATTGTTC AGCAGCCACT GCCTCCTTGT CACCTTCGCC
TGTGGTCATT CTCCCCACAT GGCCAGGGAA TGGTCTCTGT TAAAGTCTGC TAGGTCAAGG TCCTTCCTAC TCAAAATGCT
CCCTTGGCTC CCACTGCCCC CAGAGTAAAA AGCCAGACC TTCAAATGAC ACAAGGCCT ACAACGA

SEQ ID NO:35: (Length of Sequence = 266 Nucleotides)

TCCACAGGTC ATCAGATGCC TGCTNGATAA TATATAAACA GTAAAAACAA CTTTCACTTC TTCTATTNT AATCGTGTGC
CATGGATCTG ATCTGTACCA TGACCTTACA TAAGGCTGGA TGGACCTCAG GCTGAGGGCC CAATGTATGT KTGCTGTGG
GTGTGGTTGG GAGTGTGTCT GCKGAGTAAG AACACGNTTT TCAAGATTCT AAAGCTCAAT TMAAGTGGCA CATTATRAT
AAACTCAGAT CTGNTCAAAA GTCCGG

SEQ ID NO:36: (Length of Sequence = 388 Nucleotides)

CAGCTTTTGA AAGACTTTGA CCTCTGAACA AAAAGCCAGA AGGCTGCTTA AAGAAATAGT AAGGGTTTCA CTTGCCCTGG
ATAGTCACAA ATCTAGGAGT ACTGGTTCAC TGCCTTGGGT TACCAGGTAT CAGCTCTTTC ACAATCTCTC CTCTTCCCAT
GCTTCCCCCT AAAGTCCAGT TGACAAATGA AAAAGAAAAA AAGGCCTTGA TTTATAGTAT TGCCAAACAA CCTCATAAGA
ATGGGTAAAA TTACATACAC ACATACATAG AGAAGGGAGG TAATGCTGTG AATCTACTTG AGCTGGATTG CATGCTCCCT
AGGGACCACG GTGCCCAACC TGTAATTTTA TTTCTAACTT TTATAAATAT ACTCCTTTTT CACGGATG

SEQ ID NO:37: (Length of Sequence = 342 Nucleotides)

GAATGTCTAC ACAAGGAAGT ACAGGATTG GCTTTTCTAG ATGTCATATC CAACTTTCG AGTCATGAGA ACAAAGTGT
TGCCAGCAG GCCTCTCTCA CAGAGCAGAG ACTTACTGTG GAAAGCTGAG AACTGCCCGA TACAAGGCAT CATCCCATCT
CTAATTTCCC CTCTGTCTC CATCCAGCG CTCTTCCGC TTCTTCTCT ACCATACCAC TTGTGCATGC ATGTRATGTT
CTAATACCAA TTGAAGAACC GCTGTAGGTA CCTCCCTAAT AAGGATTTCT AAACCTATAG TTAGTGTGAT CATGACTTTG
GTCAAAGGCA AGTGTCCAC CC

SEQ ID NO:38: (Length of Sequence = 355 Nucleotides)

GATGACTTGG AGAATGCCGA AGAGGAAGGC CAGGAGAATG TCGAGATCCT CCCCTCTGGG GAGCGACCGC AGCCAACCG
AAGCGAATCA CCACACCATA CATGACCAAG TACGAGCGAG CCCGCTGCT GGGCACCCGA GCGCTCCAGA TTGCGATGTG
TGCCCTGTG ATGGTGGAGC TGGAGGGGGA GACAGATCCT CTGCTCATTG CCATGAAGGA ACTCAAGGCC CGAAAGATCC
CCATCATCAT TCGCCGTTAC CTGCCAGATG GGAGCTATGA AGACTGGGGG GGTGACGAG CTCATCATCA CCGACTTGAG
CTGGAGTCAT CTTTCTGMC CTTTGCCCCA TGCC

116

GATTGGTATA CGGGCAACAA TGGATTGATA GCCTTAATAT AGAAATAGTT CCAGCAGGCC AGATGCAGTG GCTCAATTCT
 GTAAACCCAG TGCTCTGCAC AGCTAGGAAG GAAGATCACT TGGGCCCAGG AGTTCAAGGC TCCAGTGAGC CATGATCAGC
 CCCTKCCCTC CAGCCTGGGT GACAGAGTNA GGCCCTGTCT CTAAAAAATG AAATAGCTCC ATCAAGTCAA TAATTAAAAG
 TTCAACAGCC CAACAGANCA AAAATTGTAA ATGANCACAA ATTAGAAAAT GTACAAATTA AATATTAAATG ACCCATAACC
 CTATAAGGGA AAGTTTAACC TCTCTAGTAT TTTT

SEQ ID NO:27: (Length of Sequence = 322 Nucleotides)

AAAACGTGAT CACCACAGCT CCGTTCCTGC AGTGACACTT AACATACTCA GCATCTTCAT GAATCTGAA TAATTTACTG
 ATCGTAAAGT CTAAAAGTAT CAATTCAGG TGAGCAGTTT TAAATCAGAA AATAGTCAAT AGTTAATCAT GACTCTTCAG
 GGTATTTCTT TCACGTCTC TGAAGAGTTT CCCAGAACAT TCTGTGAAA AGGAATGCCT CCCAACAAATG GAGGAGCAAC
 AATAGCAACA GGCATCTGAA TCAGCCTGGG CTCTGAAAAC AGACCAAGA GNGTTTTTC TGCTTTCTTC CAGTGAGGAA
 GG

SEQ ID NO:28: (Length of Sequence = 287 Nucleotides)

TATTTTTATT AAAGGACCAC CTTGGCTGTM GTGAGATGAA TGGATTCAA CAGGGCAAGA GTGGATACAG MGAGATAAGT
 TAGGAAGCTG GTATAGAAAT CTGGATGAGA TATGGTGGCT TGGATGATAC TAGCAGTGAG TATGGGAAGT AGGTGGATTA
 CTTTACACTT TTTTAGATCA GTCKATTCTT GATGCTTGA AGACAAATTA ATCTCATATA TAACTCTAAA CAACATATTT
 ATATTTTCATG TAAATAAGGA TAATGCTGAC CAAATATTAG CACCTTT

SEQ ID NO:29: (Length of Sequence = 282 Nucleotides)

CAGGGCAGGG AAGCCTGGAA GCAAAGGAGG ACCTGGCTCC TGACTCTCAG AGAGGATAGG CTGGGATCCC TGGGGCAGGC
 CTGTCTCTTG GCTGGCCAAT TTAGTCTTTC AATTGTCTAA GGGCTCTCCA TTGCCCTGCC TTGCCCTCTT CTAGCCTGTT
 ATTTCTAGGC TCCTCTGAAT AAATCTCAGG TTTCTACTG TCATGCCTTT AGTTCAAAA TGAGAATCTG CCTTACAGT
 CTGGCCTCTT TCCGGCCTGA AAGCCAGCAC CTTKCGACCC GG

SEQ ID NO:30: (Length of Sequence = 345 Nucleotides)

GAAGCTGGTG AATACATTTC AAGACACAAC ATGGCACCTG TGCTAGCTC TATGGTACAA CATGGTACTA TGACACATAT
 AATGGGTGTC CAGATGGGGA AGGCAGCTTC TCTGCACTG AGCTGAGATC TCAAAATAGA CAATGTCAAG ATGGAATGAG
 AAGGGAAAAA CAGCATGTGT AGACAGGTAG TGACAAAAGG CTAATTAAGG ACTGAAAGAA ACCAGTGGCC AACAGGGGAA
 TCTACGGGTG ATAAAGATAA GACGGTGAGA GAGATAAGGC TAGATTGTAT AAGGCTTGAC AGACCATAGC AAGATAAGCA
 AGGACCTGTG TCTGTTAAC CATTT

SEQ ID NO:31: (Length of Sequence = 343 Nucleotides)

ATAAAATTGG TCTGGGTACC CTAAGGTGTT TGCKTTGATA GAAAATTGAC ACCCCAACT AAGTGTCTA CTTAGCTTCT
 ACAATAGTTA TTCTAGACC TTAGATTAGT CATTACATTT TTATTAAAG TACTATGTTA CTTTCATGAC TACAAAATGA
 GGCACTCGTA CAAAACAGGA ATGAAAACAT ACATATACTG TCTGTCTTT ATGTCGTATT AATGCCAAG ATATTGTCAG
 GGATTATTTT AAAGAAGCCC TTAATCATGA TGGCTATTTT TAAAAATGGC ACAGGACAGT AACAGGCTGA AAAGAAACAC
 CTGGTTTGAG GGGCCAAATT AAG

SEQ ID NO:32: (Length of Sequence = 153 Nucleotides)

SEQ ID NO:20: (Length of Sequence = 437 Nucleotides)

AGAACAAGGG AACTCAGCAG CCGCTCCCTT CCCATCAGCT GTTCCTGAGA GATGCAATAT AGTAGTCATC GACATCATCC
 TTATCAACAG CATCATCACT CAGACAGTGG TGAAAGTCTT TCCTCACAAG GAAAAACAAA GATAAAGAAA TACATGAGCA
 TTAATCAGAA ATTTTCAAAG CTGGGATTCT AATGATATGC ATTATCATTG GACATTCAAA TGCTATACAT CTCTGATGA
 AGCCTCCTTG ACAGCAGCTA CACTTATTTT ACATTAGAAT GCCTAGAGAA ATCCTGACTG CCCAGCTTGG TCATGGGACC
 TCCCCACTC TCCTCTTGA GGAATGAAAA GATGTGGGG CTCTCTACTT TTGCTACTGA GCTGGGGTAT ATGCTAGGT
 CCACTTTCTA AGGGGCTTGG AAGGGTTATT CCATCTG

SEQ ID NO:21: (Length of Sequence = 385 Nucleotides)

GTTTGATTG CTTTTTTTTT AGAGTTTTAC ATCAGTGTTC TTCAGGAATA TTGGTCTTC ATTTCTTTT CTGGAATAT
 TTTCTAGTTT TACTTTGTCA GAGTAAATTC TGGCTTCACA GAATTATTG TAGTCTCTCC TGTCTTGGTT TATTATGCT
 GCTATAACAA AATACCACAG ACAAGGTGGT AATAAATAAC ACAAATTTAT TTTTCCAGT TCTGGAGGCT AGGAGTTCAA
 GAAGCTGGCA AGTTCAATGT CTGGTGAGAC CCATTCTTC ATAGGTGGCA CCATCTAGGG GTCCTTACAT GRCAAAGAGA
 TGAAGGGGCC AAAAGATGG TGACCTATTG TGAGGCCCTT TTTAAAGGGC CTTVAAATCC CAGTC

SEQ ID NO:22: (Length of Sequence = 374 Nucleotides)

ACCTTCATGG TCATGAAGGC CATGCAGTCT CTCAAGTCCC GAGGCTAAGT GAAGGAACAG TTTCGCTGGA GACATTTCTA
 CTGGTACCTT ACCAATGAGG GTATCCAGTA TCTCGTGAT TACCTTCATC TGCCCCCGGA GATTGTGCTT GCCACCTAC
 GCCGTAGCG TCCAGAGACT GGCAGGCCTC GGCCTAAAG TCTGGGAGGG TGAGCGACTT GCGAGACTCA CAAGAGGGGA
 AGCTGACAAG AGATACCTAC AAGACGGGAG TRCCTGTGCC ACCTGGTGCC GACAAGAAAG CCGAGGCTTG GGTCTGGGTC
 AGCAACCGAA TTCCAGTTA GAGGCGGATT TVGGTGTTG ACGTGTTCAG CCAC

SEQ ID NO:23: (Length of Sequence = 322 Nucleotides)

CAAAACGTGA TCACCACAGC TCGTTCTCTG CAGTGACACT TAACATACTC AGCATCTTCA TGAATCTGA ATAATTTACT
 GATCGTAAAG TCTAAAAGTA TCAATTTTCA GTGAGCAGTT TTAAATCAGA AAATAGTCAA TAGTTAATCA TGACTCTTCA
 GGGTATTTCC TTCAGTCTT CTGAAGAGTT TCCAGAACAA TTCTGTGAA AAGGAATGCC TCCCAACAAAT GGAGAGCAAC
 AATAGCAACA GGCATCTGAA TCAGCCTGGC CTCTGAAAAC AGACCANAGA GGAGTTTATC TGTTTCTTCC AGTGGAGGAA
 GG

SEQ ID NO:24: (Length of Sequence = 113 Nucleotides)

CCTGAAATCG GAGTCTTTTG GACTGACTCC AAATTCAATG GGTGGCACAG GCAGCACGGA GTCCACGTGA ATCTCCACCC
 CGTTAACAGG CGGGACGACA GCCCCTTGCA GCC

SEQ ID NO:25: (Length of Sequence = 399 Nucleotides)

GGAAAGAATG AAGGAAAAAC AAGACAAAT CTACTTCATG GCTGGGTCCA GCAGAAAAGA GCAGACGCTG GCCTCAGACA
 CAGACAGCAG TCTTGATGCC TCGACGGGAC CCCTTGAAGG CTGTGATGA TAGGTTAGAA ATAGCAAACC TGTGAGCATT
 GAAGGAATC TCACCTCGT GGGCCTGAAA TGCTTGGGAG TTGATGGAAC CAAATAGAAA AACTCCATGT TCTGCATGTA
 AGAAACACAA TGCCTTGCCC TACTCAGACC TGATAGGATT GCCTGCTTAG ATGATAAAAT GAGGCAGAAAT ATGTCTTGAA
 GAAAAAANTT GCAAGCCACA CTTCTNGAGA TTTTGTTCAA GATCCATTTC AGGGTGAGCA GTTAGAGTAG GTTGAATTT

SEQ ID NO:26: (Length of Sequence = 355 Nucleotides)

114

GGGVGCAAAG TAGCAGATTC TAGTAAAGGA CCAGATGAGG CAAAAATTAA GGCACCTCTG GAAAGAACAG GCTACACACT
 TGATGTGACC ACTGGACAGA GGAAGTATGG AGGACCACCT CCAGATTCCG TTTATYCAGG TCAGCAGCCT TCTGTTGGCA
 CTGAGATATT TGTGGGAAAG ATCCCAAGAG ATCTATTTTG AGGATGAACT TGTTCATT TA TTTGAGAAAG CTTGGACCTA
 TATGGGATCC TTCGTCTAAT GATGGATCCA CTCACCTGGT TCAATAGAGG TTAATGCGTT TGTCACTTTT TTGTACAAAA
 GGAGCARGCT CAAGGAGGGC TG

SEQ ID NO:15: (Length of Sequence = 354 Nucleotides)

ATGTTGATGC TGAAATTVAAG GATCCACCAA TTCAGAAAA ACCATGGAAG GTTCATGTGA AATGGATTTT GGACACTGAT
 ATTTTCAATG AATGGATGAA TGAGGAGGAT TATRAGGTGG ATGAAAATAG GAAGCCTGTR AGTTTYCGTC AGCGGATTTT
 AACCAAGAAT GAAGAGCCAG TCAGAAGTCC AGAAAGAAGA GATAGAAAAG CATCASCATA TGCTCGAAAG AGGAAACATT
 CGCCTTCGCC TCCCCCTCCG ACACCAACAG AWTACGGGA AGAAGAGTGG GAAGAAAGGC CAAGCTAGCC TTTTATGGGG
 AAGCCGCAAG AAGTCCAGAA AGAGGGWGG TTGA

SEQ ID NO:16: (Length of Sequence = 348 Nucleotides)

CAGGCAAGTT TCTTCCAGGA TGAGAAATCA GTGGAAAGTG AGGGCCAGCC AACAGCCACC ACCAACCACC CAACACGCGA
 GCGAGACCAT CTTAAAAGAG CCCAGCCAA GCTGACCATG GGTCTGACCC CAACTGAAG AAATGCCAG CCCAGCCAAA
 CCCAAATTGC TAACCTGTAT TATAAGCAAG TACAATGGTC CTTACCTTAA GCCACTAAGT TTTGGGATGC TTTGTTACAC
 AGCTATAGAT AAGCTGATAC AGGGAATGTC AGAWTCCATG ATGAGAGACC GAGCCTTTCA KTCTGTGAGA GGYACCTTGG
 GTTGGCAAAA CTTCAAAAAG AGGGACCT

SEQ ID NO:17: (Length of Sequence = 415 Nucleotides)

AGCAYGGGCT GGGGGGCGG GAGTTAGGC TGGGGCTTGT TTTACGCTCT GCGCCCCACA CCCCCCTCTC TTCCGTCTG
 ATTAAGCCCA AGGGTTGGTG GACTTAACTT TCAGCCCATC TCTAAGGGTT TCACAGACTG GATCTTTCTA AACTTTATIG
 GGTACCTGCT TCCCCTTTTC CCTGGTAGTT TTCTCTTACA AAAAGTCAAA ACCTGATCGA AATAGAAATA AGATCATCAA
 ATTGGACCAT TCTCTTAGCG TTAGAGTGT CCGGCCAGAC TGGCATTCAG TACACGCTGA GATCCAAACA CATCACACTG
 GCCTCAGGTC ACCAATCGC CACTCAGGGC ACAAGGCCTG CCCTTGTGGT CACAAGGCTT TCCCTAATGT CGTCGGTGCC
 CAGGTGAACC ACAAG

SEQ ID NO:18: (Length of Sequence = 356 Nucleotides)

GTATGTATGT CTGTAGGTAT TTCTATACTT AACCATCTGT GTCCCAATTA AGCTAAACAT GATTCATTCT GATGCCAACC
 CCCATCCATC ATGCCATGGA TCGCTCTAGA CTTCTTCCCT TGTAACCTCC CACTCAAACA GTGAGAAACC TTGCCCCAGT
 ATGTTTGGGA GTAACCTCAC TGGGAGTTTG CAGTCCCACT AGATGAATGC CAACCCATT GTTCATTAA AAGGACTTTT
 GGAACCATAG AGCAATGGCT GGGCTGGGTC TVGCACGTTT ATCTTGACTG AAACAATTGG CCATGAAGGC ACTTGCCAAG
 GAAACTCTAG GGGCCACAAG GGTCTGGGT GCTTGC

SEQ ID NO:19: (Length of Sequence = 339 Nucleotides)

CATGCTTCCA TTTTITTTAG TTTTAAACCA CCAAACCAAT ATTTTYCCTT TAAATTTTAA TCTTATAATA TAGAAATCTT
 ATGTAAATGA AATTTTGICA TGTTCAAAT AAAGAGAACT GAAGTAGAAA ATAGAAATGC CAGTAAACAA CATAATGTTT
 AATTTACAAC TTACATTAGG GGTITGGGGG VATGCTAATT ATATATTGAG AATATACATT AGAAGCTTTC AAAATGGGCT
 CTCTAATGA GGTCACTACT GAACATAAT GTTCCCTCTT CTGTAAATA GAATAGGTTT AAATGACTAG TCCAAATGGA
 ATTATTGCCT TCTGTATA

113

AACITGCAAC ATAAATACTA GAAAAAGAGA AAATATCATC AAAATACAAA TAACTGTAG AAATCATTGC TCAAAAGAAR
 AACCTGGCAA TGCATGATTA CGAAATGCAA AAGAMGATAC AGTTGCTCTC TGTATATGCG CTTTCCACAT CCACAGATTG
 AAACAACGTG GGATAAAAAA GGATTTTTC A TGCCATTAA ACAVCAATGC AACAGTAA

SEQ ID NO:8: (Length of Sequence = 345 Nucleotides)

CTACAATAGA AGGCAAACTA TGTCCTCTT TTGCTCAGAA ACTTTTAATA TCTKCCTATT TCCCCATGTA AAAGCCAATC
 CTCAACCACA GTGTAGAAGG GCTATCCATT TCTAGCTACA CATCTCTCA GTCACTGCCC CCAGCCCCAG TACTTGGGGA
 CTTTGCCCTT GCAGTTCCTT GTGCCAGCAA ACTCTTCTC CAGATGTCCA CATGACTCAC CCNCTCTCT CAGGGGTCTT
 CTCAAATGTC ACTTTACCAG AGGTGGCTTC CCGACCATC CTGTATAAAT AGCATCACCC TACCTCTCTT CTCTCTCTCT
 AATGTCTCAG GAATTGATA TCAAG

SEQ ID NO:9: (Length of Sequence = 189 Nucleotides)

GIGAACAGAC TAAGGCCCTT NIGGAGGCC AGAATAAGAT TACTGTGCCA TTTCTTGAGC AGTGTCCCAT CAGAGGTTTA
 TACAAAGAGA GAATGACTGA ACTATATGAT TATCCANGT ATAGTTGCCA CTTCAAGAAA GGAGAACGGT GTTTTATTTT
 TTACAATACA GGNITINAGA ACCACOGGG

SEQ ID NO:10: (Length of Sequence = 267 Nucleotides)

CTCCCTTCGC CACCTGCTGG ACGCGAGGG CTACTACGAT GCCATGGGTG TOCTGRITTT TTATTTCTCA GACAGGACTG
 CTCTGTATNT GTCTTTGGAT TCTACGTAGA TTTATATTTG TAAATATTA CATTTGTCAT GACCAGAAGA AATGTCATTA
 TCGTAAATTT TAGATTCTGG NGTCTATATA TGAAGNAAT ACTAACTACT AACTGTTATA ACAWCAAAT GTGGGNTGTA
 TATCTACARG CCNGAGCCGA CTGTCA

SEQ ID NO:11: (Length of Sequence = 247 Nucleotides)

CTCATAAAGC CAGGGTGATA AAATGTTAG TTTTCATGTT TCTACAAGRC TAAGTCAAA ATTCCATGCA TGTGCTGRTA
 AAAGACCCAT NATGKKCTM ACTGTACTTA CCCCCATTT ATTAGCATTC ATTCTGTCA CCAGCTCTAG TTCTCTGCT
 TAGCGAATCT CGCTGTCTT CAAGATGTC TTCAAATGTC ACATTTTGTG GGAAGCCTG CCTTTTTTGA CAGGCTCTCC
 CTGCCAC

SEQ ID NO:12: (Length of Sequence = 280 Nucleotides)

AAGGCGAGAG GCTTCTGGAG AAACCCACCC CACCAACGTC TTGATCTTGG ACTTTTAVCC TCCAGAGCTA TGAGAAAACA
 AVTTTCTGTV VATVGVGCC ACTCAGCTG TGGATACTGG CAGCOCTAGC AAACCTATAC ACACATACAT TTAAACTCG
 GTTAATCCT GTGCCATTC ACTTATGGTT CAGTTTTTAA ATAGTCTAG TCTTATGVCC ACTGTTAAAG TTCACCAGGA
 CATAGGSCAT TGGGAAAGG GGCTGTAACT TCTTGATTA

SEQ ID NO:13: (Length of Sequence = 339 Nucleotides)

VCTVTCTVCC AACTTCATTC AGATATTGAC TCTGGTGATG GGAACATTAA ATACATTCTC TCAGGGGAAG GAGCTGGAAC
 CATTTTIVTR ATTGATGACA AATCAGGGAA CATTCATGCC ACCAAGACGT TGGATCGAGA AGAGAGAGCC CAGTACAGT
 TGATGGCTCA GGCGGTGGAC AGGGACACCA ATCGGCCACT GGAGCCACG TOGGAATTCA TTKTCAAGGK CCAGGACATT
 AATGACAGTC CTCGGAGGT TTCTGTCAG AGACCTATCA TGCCAACTGT GCCSTGTARA GGTCCAATKT TGGGTGSTGT
 ACGGTAGTGG GGAGGCCCTG

SEQ ID NO:14: (Length of Sequence = 342 Nucleotides)

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AGAGGCAGAG AAGAGCTTCA CAAGGTGTGT GCCAGCTCTG CATCATTTCC AGCTGCTCAA CCACCATTTC TCCCATTTTA
GGTCCCAAA AGTAGGAGGT GGGGCTCAC AGAGCTGCTG TGGGCTTTGG GTATCAAAG CTGCAGCCAC CATATGGGGC
ACTCTGGCT GGTGTACAG GTGGGCATTG CCCAGGTCTT TT

SEQ ID NO:2: (Length of Sequence = 214 Nucleotides)

GTTTNCITTT TTTCTTAGCT TCATTTCTCT TAAAAACAA GGAACAAGAA AACATTGCAC CAGCGTTCTA AGCCTCAAAC
AAAANACAAA ACAAATCCCC CTGCGAAGAA CAATAAATT TACATCTCTT TGGCAACAAT AACTTAAAT CACCCAATT
CCATTGCTC CAACCACAGC AGTTAGTTAG TTACAAAAT ATTCCNTGTG CTGC

SEQ ID NO:3: (Length of Sequence = 344 Nucleotides)

ATTAAATAGGA AAGATGATTG TATAGATGGT GGGCTATTAA CTCAGATCAG GATGAGAATC GGGAGTGCCT TTACATGTGT
GGTACCAAA TGGGTGGTTG GATATAAGAG TAACAAAAGG ACTGAAAGGG TTAAAAAGA AAGAAAAAA AAAAATCCCC
TGGTTGGGAG GGTGTTAAGT ATGAGTGT TTTCAAACC ATTCCTCTC TGCTCACCTA CCCCTAGGTG ATTAAAGGAG
ATAACTTTTA AAAAAGAAAG AATTGGCTCA AAGTACTGT AAATTCTAGG ATTATATACC TTTATATAGG TTCATTCCCT
GATCCCTGTA TTATCAAGGC ACAG

SEQ ID NO:4: (Length of Sequence = 352 Nucleotides)

GACCCGTAA CCGAGGCGGC AAGGAGGCCA GGTAGTCCCG GCACCTCTCA CTCTGCAGAG ACCAGCGGT TCGTGGGAGG
CCTGTGGGTC ACACGTAGGG GCTAGAGCCA GCCTGCATCC TGCCACCGG GCTCCACTTG GAGATCAGCA GGAGGGCCAG
TGTGGGACCC CTGCTGCCAC CTCTCTGGG CCGTGTCTCT TTCTGGAAAT TAAGAAGGTG TGCTCCAGAG CCAAGAGGAG
CAATAAGAAA CCGTGTGTG CAGCTTCTTA AGGGTTCAG TGCAAGACCC CA

SEQ ID NO:5: (Length of Sequence = 562 Nucleotides)

ATACCTTAC ATATATATTC ACAGAAAATC ATATTGCATA TACTCTTCT CCACATCATA AAAATGGGTG TTGGGCTCTC
TAGGACACAA GGAAGCAGG CCAAATTTCT CATATTTTCA GGAATAAAT GAGTGCCCG AAGGTGTAAT AGGAACCTTT
TACTAACCTC ATCTGACTTC ATCTCACAC CAGCATTTTG TGTTAAGGA AACTGGCGA GAGTGGTTAA GAAATATATC
CAAAGACGTA TAGTTCCAA TGAACACGG ATCTTTTAT TTAAATTTCA ATCATCTTTC CATTATATCA GCCAATGATG
GAGCAGAAAG CTGGTCCAGG CAATCCAGA ATAGATCTTT CTAGGCACCC GTTCAGTGTG AGGAGGGGGA AGTGGCCTTG
CCAAGGGGCC AGTGAGCTCA ATTAGGGTTA ACGCTGCTTC TTAGCCTACC CCAGGGGNC CCGCACTTAG GTTGTPTTGT
GCCAGCTTT GGCAGGAAGC ATCTCTCTT TCAAAGATTN NAGCCTTGG GTCATATATC GGGTGTATA GGGTCTTTT
TT

SEQ ID NO:6: (Length of Sequence = 359 Nucleotides)

ACATGTTCTC CCTCTTTCAA TTTTAGCAGT AATGTGATCC TCAAAAATGC ATTAATACTA GTTGAAGTAA ATAAACGGAA
GAGCTCCAAA ATGCTGTCAT TAAATGCATT TTTCCACACT AATGCCAATC ATCCAAAGCT ATTTTCAACA AGTCAGGTAT
TCAAAGCTAT TCACACCACT TGAAGAGTA ATTACCAATT ACTGAAGCAC TTATCTGTCC TACACTGATG GGAGTAAATG
CTTCTCATAG GTTATCTCAT GTACATTATG CCACCTTINAC TTAAAATGAT CACAATTINAG TGCTATAGGT TTTTGGGTTA
ATGTTTTCCC NGGGGGAGTT GTTAAAAACA TGGCATTTC

SEQ ID NO:7: (Length of Sequence = 218 Nucleotides)

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SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Venter, J. Craig
Adams, Mark D.
Moreno, Ruben F.

(ii) TITLE OF INVENTION: Sequences Characteristic of Human Gene
Transcription Product

(iii) NUMBER OF SEQUENCES: 2412 (1-2421, with 9 SEQ ID NOS unused.)

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Knobbe, Martens, Olson, and Bear
(B) STREET: 620 Newport Center Dr. Sixteenth Floor
(C) CITY: Newport Beach
(D) STATE: CA
(E) COUNTRY: USA
(F) ZIP: 92660

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 07/837,195
(B) FILING DATE: 12-FEB-1992

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: US 07/716,831
(B) FILING DATE: 20-JUN-1991

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Israelsen, Ned A.
(B) REGISTRATION NUMBER: 29,655
(C) REFERENCE/DOCKET NUMBER: NIH004.004CP1

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 619-235-8550
(B) TELEFAX: 619-235-0176

SEQ ID NO:1: (Length of Sequence = 362 Nucleotides)

CTTCCCTTTT GTTCCCTCA GTGTCCCTTT TAATGCTTC CCTCCATTTT CCTTAGCAGC ATCCTAGTTG ATGGTCTGGG
TTATCAGAGG AGCAAAACA TTAAAGTGT AAATAATGCT CATGTCTCC CTGGGATTTC TAAACAGAAA AAATGAAGAA

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NOTE REGARDING SEQUENCE LISTINGS: The listings of SEQ ID NOS: 1-2421 are in numerical order. However, an occasional number (for example, SEQ ID NO: 44) is not found in this list. In all, 9 SEQ ID NOS are not used. Nevertheless, the convention "1-2421" is used, for example, to refer to all the SEQ ID NOS in the following list, while "1-315" is used, for example, to refer to all the listed sequences falling between SEQ ID NO 1 and SEQ ID NO 315.

ID	EST	GB	Close
392	EST01416	W7261	HRBA09
393	EST01417	W7262	HRBA07
394	EST01418	W7263	HRBA02
395	EST01419	W7264	HRBA26
396	EST01420	W7265	HRBA27
397	EST01421	W7266	HRBA04
398	EST01422	W7267	HRBA06
399	EST01423	W7268	HRBA08
400	EST01424	W7269	HRBA11
401	EST01425	W7270	HRBA21
402	EST01426	W7271	HRBA22
403	EST01427	W7272	HRBA24
404	EST02713	M6178	HRBA24
405	EST02714	M6179	HRIA23
406	EST02715	M6180	HRIA23
407	EST02716	M6211	HLG50
408	EST02717	M6212	HLG50
409	EST02718	M6221	WFC976

Clone	EST#	GB#	SEQ ID	Clone	EST#	GB#	SEQ ID	Clone	EST#	GB#	SEQ ID
HCCPN52	EST01304	M79156	2259	HCCPN52	EST01791	M78198	2326	HCCPN52	EST01390	M79250	2314
HCCPN54	EST01305	M79157	2260	HCCPN54	EST01354	M79206	2327	HCCPN54	EST01391	M79251	2315
HCCPN60	EST01755	M78162	2261	HCCPN60	EST01355	M79207	2328	HCCPN60	EST01392	M79252	2316
HCCPN63	EST01304	M79158	2262	HCCPN63	EST01792	M78199	2329	HCCPN63	EST01393	M79253	2317
HCCPN64	EST01307	M79159	2263	HCCPN64	EST01793	M79208	2330	HCCPN64	EST01394	M79254	2318
HCCPN65	EST01308	M79160	2264	HCCPN65	EST01794	M78201	2331	HCCPN65	EST01395	M79255	2319
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1807	EST01004	W78057	HCPC158	2023	EST01113	W78065	HCPC11
1808	EST01005	W78058	HCPC159	2024	EST01114	W78066	HCPC14
1809	EST01006	W78059	HCPC160	2025	EST01115	W78067	HCPC16
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1814	EST01011	W78064	HCPC165	2030	EST01120	W78072	HCPC42
1815	EST01012	W78065	HCPC166	2031	EST01121	W78073	HCPC44
1816	EST01013	W78066	HCPC167	2032	EST01122	W78074	HCPC45
1817	EST01014	W78067	HCPC168	2033	EST01123	W78075	HCPC49
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1819	EST01016	W78069	HCPC170	2035	EST01125	W78077	HCPC55
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1866	EST00989	M78841	HHCME99
1867	EST00990	M78842	HHCME99
1868	EST00991	M78843	HHCME99
1869	EST00992	M78844	HHCME99
1870	EST00993	M78845	HHCME99
1871	EST00994	M78846	HHCME99
1872	EST00995	M78847	HHCME99
1873	EST01630	M78043	HHCME99
1874	EST00996	M78848	HHCME99
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1880	EST01634	M78047	HHCME99
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1759	EST00902	M78754	HHCME23
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1761	EST01598	M78756	HHCME24
1762	EST00904	M78757	HHCME25
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1764	EST02690	M86158	HHCME26
1765	EST01600	M78014	HHCME27
1766	EST00906	M78759	HHCME29
1767	EST00907	M78760	HHCME31
1768	EST00908	M78761	HHCME33
1769	EST00909	M78762	HHCME33
1770	EST00910	M78763	HHCME37
1771	EST01601	M78764	HHCME40
1772	EST02691	M86159	HHCME40
1773	EST00911	M78765	HHCME45
1774	EST00912	M78766	HHCME47
1775	EST02692	M86160	HHCME48
1776	EST01603	M78017	HHCME52
1777	EST00913	M78767	HHCME53
1778	EST00914	M78768	HHCME54
1779	EST00915	M78769	HHCME56
1780	EST00916	M78770	HHCME57
1781	EST00917	M78771	HHCME58
1782	EST00918	M78772	HHCME60
1783	EST00919	M78773	HHCME61
1784	EST00920	M78774	HHCME65
1785	EST00921	M78775	HHCME68
1786	EST00922	M78776	HHCME69
1787	EST00923	M78777	HHCME71
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1789	EST00925	M78779	HHCME78
1790	EST00926	M78780	HHCME90
1791	EST00927	M78781	HHCME91
1792	EST00928	M78782	HHCME94
1793	EST00929	M78783	HHCME94
1794	EST01607	M78021	HHCME99
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1798	EST00933	M78787	HHCME99
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1808	EST00942	M78796	HHCME99
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1811	EST00945	M78799	HHCME99
1812	EST02693	M86161	HHCME99
1813	EST00946	M78800	HHCME99
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1815	EST01615	M78028	HHCME99
1816	EST00948	M78802	HHCME99
1817	EST00949	M78803	HHCME99
1818	EST01616	M78029	HHCME99
1819	EST00950	M78804	HHCME99
1820	EST00951	M78805	HHCME99
1821	EST00952	M78806	HHCME99
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1823	EST00954	M78808	HHCME99

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1503	EST02543	MB6018	HFBCY31	1637	EST00796	MB7648	HCMA16
1504	EST02544	MB6019	HFBCY33	1638	EST00798	MB7650	HCMA26
1505	EST02545	MB6020	HFBCY34	1639	EST00799	MB7651	HCMA28
1506	EST02546	MB6021	HFBCY35	1640	EST00800	MB7652	HCMA29
1507	EST02547	MB6022	HFBCY36	1641	EST00801	MB7653	HCMA32
1508	EST02548	MB6023	HFBCY37	1642	EST00802	MB7654	HCMA33
1509	EST02549	MB6024	HFBCY38	1643	EST00803	MB7655	HCMA36
1510	EST02550	MB6025	HFBCY40	1644	EST01571	MB7986	HCMA37
1511	EST02551	MB6026	HFBCY41	1645	EST00804	MB7656	HCMA40
1512	EST02552	MB6027	HFBCY43	1646	EST00805	MB7657	HCMA41
1513	EST02553	MB6028	HFBCY44	1647	EST00806	MB7658	HCMA45
1514	EST02554	MB6029	HFBCY45	1648	EST00807	MB7659	HCMA45
1515	EST02555	MB6030	HFBCY50	1649	EST00808	MB7660	HCMA48
1516	EST02556	MB6031	HFBCY51	1650	EST00809	MB7661	HCMA49
1517	EST02557	MB6032	HFBCY52	1651	EST00810	MB7662	HCMA52
1518	EST02558	MB6033	HFBCY53	1652	EST00811	MB7663	HCMA53
1519	EST02559	MB6034	HFBCY54	1653	EST00812	MB7664	HCMA55
1520	EST02560	MB6035	HFBCY55	1654	EST01572	MB7987	HCMA56
1521	EST02561	MB6036	HFBCY56	1655	EST00813	MB7665	HCMA57
1522	EST02562	MB6037	HFBCY57	1656	EST00814	MB7666	HCMA58
1523	EST02563	MB6038	HFBCY58	1657	EST00815	MB7667	HCMA60
1524	EST02564	MB6039	HFBCY59	1658	EST00816	MB7668	HCMA62
1525	EST02565	MB6040	HFBCY60	1659	EST00817	MB7669	HCMA68
1526	EST02566	MB6041	HFBCY61	1660	EST00818	MB7670	HCMA72
1527	EST02567	MB6042	HFBCY62	1661	EST00819	MB7671	HCMA73
1528	EST02568	MB6043	HFBCY63	1662	EST00820	MB7672	HCMA78
1529	EST02569	MB6044	HFBCY64	1663	EST00821	MB7673	HCMA80
1530	EST02570	MB6045	HFBCY65	1664	EST00822	MB7674	HCMA81
1531	EST02571	MB6046	HFBCY66	1665	EST00823	MB7675	HCMA82
1532	EST02572	MB6047	HFBCY67	1666	EST00824	MB7676	HCMA83
1533	EST02573	MB6048	HFBCY68	1667	EST00825	MB7677	HCMA84
1534	EST02574	MB6049	HFBCY69	1668	EST00826	MB7678	HCMA84
1535	EST02575	MB6050	HFBCY70	1669	EST00827	MB7679	HCMA83
1536	EST02576	MB6051	HFBCY71	1670	EST00828	MB7680	HCMA82
1537	EST02577	MB6052	HFBCY72	1671	EST00829	MB7681	HCMA82
1538	EST02578	MB6053	HFBCY73	1672	EST00830	MB7682	HCMA82
1539	EST02579	MB6054	HFBCY74	1673	EST00831	MB7683	HCMA82
1540	EST02580	MB6055	HFBCY75	1674	EST00832	MB7684	HCMA82
1541	EST02581	MB6056	HFBCY76	1675	EST00833	MB7685	HCMA82
1542	EST02582	MB6057	HFBCY77	1676	EST00834	MB7686	HCMA82
1543	EST02583	MB6058	HFBCY78	1677	EST00835	MB7687	HCMA82
1544	EST02584	MB6059	HFBCY79	1678	EST00836	MB7688	HCMA82
1545	EST02585	MB6060	HFBCY80	1679	EST00837	MB7689	HCMA82
1546	EST02586	MB6061	HFBCY81	1680	EST00838	MB7690	HCMA82
1547	EST02587	MB6062	HFBCY82	1681	EST01573	MB7988	HCMA82
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1552	EST02592	MB6067	HFBCY87	1686	EST01574	MB7989	HCMA82
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1562	EST02602	MB6077	HFBCY97	1696	EST00851	MB7703	HCMA82
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1565	EST02605	MB6080	HFBCY00	1699	EST00854	MB7706	HCMA82
1566	EST02606	MB6081	HFBCY01	1700	EST00855	MB7707	HCMA82
1567	EST02607	MB6082	HFBCY02	1701	EST00856	MB7708	HCMA82
1568	EST02608	MB6083	HFBCY03	1702	EST00857	MB7709	HCMA82
1569	EST02609	MB6084	HFBCY04	1703	EST00858	MB7710	HCMA82
1570	EST02610	MB6085	HFBCY05	1704	EST00859	MB7711	HCMA82
1571	EST02611	MB6086	HFBCY06	1705	EST00860	MB7712	HCMA82

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1376	EST02346	M85824	HFBC039	1382	EST02413	M85889	HFBCP23
1377	EST02347	M85825	HFBC040	1383	EST02414	M85890	HFBCP24
1378	EST02348	M85826	HFBC041	1384	EST02415	M85891	HFBCP25
1379	EST02349	M85827	HFBC042	1385	EST02416	M85892	HFBCP26
1380	EST02350	M85828	HFBC043	1386	EST02417	M85893	HFBCP27
1381	EST02351	M85829	HFBC044	1387	EST02418	M85894	HFBCP28
1382	EST02352	M85830	HFBC045	1388	EST02419	M85895	HFBCP29
1383	EST02353	M85831	HFBC046	1389	EST02420	M85896	HFBCP30
1384	EST02354	M85832	HFBC047	1390	EST02421	M85897	HFBCP31
1385	EST02355	M85833	HFBC048	1391	EST02422	M85898	HFBCP32
1386	EST02356	M85834	HFBC049	1392	EST02423	M85899	HFBCP33
1387	EST02357	M85835	HFBC050	1393	EST02424	M85900	HFBCP34
1388	EST02358	M85836	HFBC051	1394	EST02425	M85901	HFBCP35
1389	EST02359	M85837	HFBC052	1395	EST02426	M85902	HFBCP36
1390	EST02360	M85838	HFBC053	1396	EST02427	M85903	HFBCP37
1391	EST02361	M85839	HFBC054	1397	EST02428	M85904	HFBCP38
1392	EST02362	M85840	HFBC055	1398	EST02429	M85905	HFBCP39
1393	EST02363	M85841	HFBC056	1399	EST02430	M85906	HFBCP40
1394	EST02364	M85842	HFBC057	1400	EST02431	M85907	HFBCP41
1395	EST02365	M85843	HFBC058	1401	EST02432	M85908	HFBCP42
1396	EST02366	M85844	HFBC059	1402	EST02433	M85909	HFBCP43
1397	EST02367	M85845	HFBC060	1403	EST02434	M85910	HFBCP44
1398	EST02368	M85846	HFBC061	1404	EST02435	M85911	HFBCP45
1399	EST02369	M85847	HFBC062	1405	EST02436	M85912	HFBCP46
1400	EST02370	M85848	HFBC063	1406	EST02437	M85913	HFBCP47
1401	EST02371	M85849	HFBC064	1407	EST02438	M85914	HFBCP48
1402	EST02372	M85850	HFBC065	1408	EST02439	M85915	HFBCP49
1403	EST02373	M85851	HFBC066	1409	EST02440	M85916	HFBCP50
1404	EST02374	M85852	HFBC067	1410	EST02441	M85917	HFBCP51
1405	EST02375	M85853	HFBC068	1411	EST02442	M85918	HFBCP52
1406	EST02376	M85854	HFBC069	1412	EST02443	M85919	HFBCP53
1407	EST02377	M85855	HFBC070	1413	EST02444	M85920	HFBCP54
1408	EST02378	M85856	HFBC071	1414	EST02445	M85921	HFBCP55
1409	EST02379	M85857	HFBC072	1415	EST02446	M85922	HFBCP56
1410	EST02380	M85858	HFBC073	1416	EST02447	M85923	HFBCP57
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1412	EST02382	M85860	HFBC075	1418	EST02449	M85925	HFBCP59
1413	EST02383	M85861	HFBC076	1419	EST02450	M85926	HFBCP60
1414	EST02384	M85862	HFBC077	1420	EST02451	M85927	HFBCP61
1415	EST02385	M85863	HFBC078	1421	EST02452	M85928	HFBCP62
1416	EST02386	M85864	HFBC079	1422	EST02453	M85929	HFBCP63
1417	EST02387	M85865	HFBC080	1423	EST02454	M85930	HFBCP64
1418	EST02388	M85866	HFBC081	1424	EST02455	M85931	HFBCP65
1419	EST02389	M85867	HFBC082	1425	EST02456	M85932	HFBCP66
1420	EST02390	M85868	HFBC083	1426	EST02457	M85933	HFBCP67
1421	EST02391	M85869	HFBC084	1427	EST02458	M85934	HFBCP68
1422	EST02392	M85870	HFBC085	1428	EST02459	M85935	HFBCP69
1423	EST02393	M85871	HFBC086	1429	EST02460	M85936	HFBCP70
1424	EST02394	M85872	HFBC087	1430	EST02461	M85937	HFBCP71
1425	EST02395	M85873	HFBC088	1431	EST02462	M85938	HFBCP72
1426	EST02396	M85874	HFBC089	1432	EST02463	M85939	HFBCP73
1427	EST02397	M85875	HFBC090	1433	EST02464	M85940	HFBCP74
1428	EST02398	M85876	HFBC091	1434	EST02465	M85941	HFBCP75
1429	EST02399	M85877	HFBC092	1435	EST02466	M85942	HFBCP76
1430	EST02400	M85878	HFBC093	1436	EST02467	M85943	HFBCP77
1431	EST02401	M85879	HFBC094	1437	EST02468	M85944	HFBCP78
1432	EST02402	M85880	HFBC095	1438	EST02469	M85945	HFBCP79
1433	EST02403	M85881	HFBC096	1439	EST02470	M85946	HFBCP80
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1437	EST02407	M85885	HFBC100	1443	EST02474	M85950	HFBCP84
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1443			HFBC106		EST02480	M85956	HFBCP90
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1133	EST02153	M85636	HFBC20	1254	EST02283	M85762	HFBCM29
1134	EST02154	M85637	HFBC22	1255	EST02284	M85763	HFBCM31
1135	EST02155	M85638	HFBC25	1256	EST02285	M85764	HFBCM36
1136	EST02156	M85639	HFBC26	1257	EST02286	M85765	HFBCM37
1137	EST02157	M85640	HFBC28	1258	EST02287	M85766	HFBCM39
1138	EST02158	M85642	HFBC30	1259	EST02288	M85767	HFBCM40
1139	EST02159	M85644	HFBC31	1260	EST02289	M85768	HFBCM42
1140	EST02160	M85645	HFBC32	1261	EST02290	M85769	HFBCM46
1141	EST02161	M85647	HFBC33	1262	EST02291	M85770	HFBCM47
1142	EST02162	M85648	HFBC34	1263	EST02292	M85771	HFBCM48
1143	EST02163	M85649	HFBC35	1264	EST02293	M85772	HFBCM49
1144	EST02164	M85650	HFBC36	1265	EST02294	M85773	HFBCM50
1145	EST02165	M85651	HFBC38	1266	EST02295	M85774	HFBCM51
1146	EST02166	M85652	HFBC39	1267	EST02296	M85775	HFBCM52
1147	EST02167	M85653	HFBC41	1268	EST02297	M85776	HFBCM54
1148	EST02168	M85654	HFBC46	1269	EST02298	M85777	HFBCM55
1149	EST02169	M85655	HFBC47	1270	EST02299	M85778	HFBCM56
1150	EST02170	M85656	HFBC48	1271	EST02300	M85779	HFBCM57
1151	EST02171	M85657	HFBC50	1272	EST02301	M85780	HFBCM58
1152	EST02172	M85659	HFBC51	1273	EST02302	M85781	HFBCM59
1153	EST02173	M85658	HFBC53	1274	EST02303	M85782	HFBCM60
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1155	EST02175	M85660	HFBC58	1276	EST02305	M85784	HFBCM62
1156	EST02176	M85661	HFBC59	1277	EST02306	M85785	HFBCM64
1157	EST02177	M85662	HFBC64	1278	EST02307	M85786	HFBCM65
1158	EST02178	M85663	HFBC68	1279	EST02308	M85787	HFBCM66
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1160	EST02180	M85665	HFBC72	1281	EST02310	M85789	HFBCM68
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1162	EST02182	M85667	HFBC75	1283	EST02312	M85791	HFBCM71
1163	EST02183	M85668	HFBC77	1284	EST02313	M85792	HFBCM75
1164	EST02184	M85669	HFBC79	1285	EST02314	M85793	HFBCM77
1165	EST02185	M85670	HFBC81	1286	EST02315	M85794	HFBCM82
1166	EST02186	M85671	HFBC82	1287	EST02316	M85795	HFBCM83
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1170	EST02190	M85675	HFBC87	1291	EST02320	M85799	HFBCM89
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944	EST01949	M85433	HFBC113	1076	EST02094	M85578	HFBCJ18	1076	EST02094	M85578	HFBCJ18
945	EST01950	M85434	HFBC114	1077	EST02095	M85579	HFBCJ20	1077	EST02095	M85579	HFBCJ20
946	EST01951	M85435	HFBC115	1078	EST02096	M85580	HFBCJ21	1078	EST02096	M85580	HFBCJ21
947	EST01952	M85436	HFBC116	1079	EST02097	M85581	HFBCJ22	1079	EST02097	M85581	HFBCJ22
948	EST01953	M85437	HFBC117	1080	EST02098	M85582	HFBCJ23	1080	EST02098	M85582	HFBCJ23
949	EST01954	M85438	HFBC118	1081	EST02099	M85583	HFBCJ24	1081	EST02099	M85583	HFBCJ24
950	EST01955	M85439	HFBC119	1082	EST02100	M85584	HFBCJ25	1082	EST02100	M85584	HFBCJ25
951	EST01956	M85440	HFBC120	1083	EST02101	M85585	HFBCJ26	1083	EST02101	M85585	HFBCJ26
952	EST01957	M85441	HFBC121	1084	EST02102	M85586	HFBCJ27	1084	EST02102	M85586	HFBCJ27
953	EST01958	M85442	HFBC122	1085	EST02103	M85587	HFBCJ28	1085	EST02103	M85587	HFBCJ28
954	EST01959	M85443	HFBC123	1086	EST02104	M85588	HFBCJ29	1086	EST02104	M85588	HFBCJ29
955	EST01960	M85444	HFBC124	1087	EST02105	M85589	HFBCJ30	1087	EST02105	M85589	HFBCJ30
956	EST01961	M85445	HFBC125	1088	EST02106	M85590	HFBCJ31	1088	EST02106	M85590	HFBCJ31
957	EST01962	M85446	HFBC126	1089	EST02107	M85591	HFBCJ32	1089	EST02107	M85591	HFBCJ32
958	EST01963	M85447	HFBC127	1090	EST02108	M85592	HFBCJ33	1090	EST02108	M85592	HFBCJ33
959	EST01964	M85448	HFBC128	1091	EST02109	M85593	HFBCJ34	1091	EST02109	M85593	HFBCJ34
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961	EST01966	M85450	HFBC130	1093	EST02111	M85595	HFBCJ36	1093	EST02111	M85595	HFBCJ36
962	EST01967	M85451	HFBC131	1094	EST02112	M85596	HFBCJ37	1094	EST02112	M85596	HFBCJ37
963	EST01968	M85452	HFBC132	1095	EST02113	M85597	HFBCJ38	1095	EST02113	M85597	HFBCJ38
964	EST01969	M85453	HFBC133	1096	EST02114	M85598	HFBCJ39	1096	EST02114	M85598	HFBCJ39
965	EST01970	M85454	HFBC134	1097	EST02115	M85599	HFBCJ40	1097	EST02115	M85599	HFBCJ40
966	EST01971	M85455	HFBC135	1098	EST02116	M85600	HFBCJ41	1098	EST02116	M85600	HFBCJ41
967	EST01972	M85456	HFBC136	1099	EST02117	M85601	HFBCJ42	1099	EST02117	M85601	HFBCJ42
968	EST01973	M85457	HFBC137	1100	EST02118	M85602	HFBCJ43	1100	EST02118	M85602	HFBCJ43
969	EST01974	M85458	HFBC138	1101	EST02119	M85603	HFBCJ44	1101	EST02119	M85603	HFBCJ44
970	EST01975	M85459	HFBC139	1102	EST02120	M85604	HFBCJ45	1102	EST02120	M85604	HFBCJ45
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972	EST01977	M85461	HFBC141	1104	EST02122	M85606	HFBCJ47	1104	EST02122	M85606	HFBCJ47
973	EST01978	M85462	HFBC142	1105	EST02123	M85607	HFBCJ48	1105	EST02123	M85607	HFBCJ48
974	EST01979	M85463	HFBC143	1106	EST02124	M85608	HFBCJ49	1106	EST02124	M85608	HFBCJ49
975	EST01980	M85464	HFBC144	1107	EST02125	M85609	HFBCJ50	1107	EST02125	M85609	HFBCJ50
976	EST01981	M85465	HFBC145	1108	EST02126	M85610	HFBCJ51	1108	EST02126	M85610	HFBCJ51
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978	EST01983	M85467	HFBC147	1110	EST02128	M85612	HFBCJ53	1110	EST02128	M85612	HFBCJ53
979	EST01984	M85468	HFBC148	1111	EST02129	M85613	HFBCJ54	1111	EST02129	M85613	HFBCJ54
980	EST01985	M85469	HFBC149	1112	EST02130	M85614	HFBCJ55	1112	EST02130	M85614	HFBCJ55
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982	EST01987	M85471	HFBC151	1114	EST02132	M85616	HFBCJ57	1114	EST02132	M85616	HFBCJ57
983	EST01988	M85472	HFBC152	1115	EST02133	M85617	HFBCJ58	1115	EST02133	M85617	HFBCJ58
984	EST01989	M85473	HFBC153	1116	EST02134	M85618	HFBCJ59	1116	EST02134	M85618	HFBCJ59
985	EST01990	M85474	HFBC154	1117	EST02135	M85619	HFBCJ60	1117	EST02135	M85619	HFBCJ60
986	EST01991	M85475	HFBC155	1118	EST02136	M85620	HFBCJ61	1118	EST02136	M85620	HFBCJ61
987	EST01992	M85476	HFBC156	1119	EST02137	M85621	HFBCJ62	1119	EST02137	M85621	HFBCJ62
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989	EST01994	M85478	HFBC158	1121	EST02139	M85623	HFBCJ64	1121	EST02139	M85623	HFBCJ64
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992	EST01997	M85481	HFBC161	1124	EST02142	M85626	HFBCJ67	1124	EST02142	M85626	HFBCJ67
993	EST01998	M85482	HFBC162	1125	EST02143	M85627	HFBCJ68	1125	EST02143	M85627	HFBCJ68
994	EST01999	M85483	HFBC163	1126	EST02144	M85628	HFBCJ69	1126	EST02144	M85628	HFBCJ69
995	EST02000	M85484	HFBC164	1127	EST02145	M85629	HFBCJ70	1127	EST02145	M85629	HFBCJ70
996	EST02001	M85485	HFBC165	1128	EST02146	M85630	HFBCJ71	1128	EST02146	M85630	HFBCJ71
997	EST02002	M85486	HFBC166	1129	EST02147	M85631	HFBCJ72	1129	EST02147	M85631	HFBCJ72
998	EST02003	M85487	HFBC167	1130	EST02148	M85632	HFBCJ73	1130	EST02148	M85632	HFBCJ73
999	EST02004	M85488	HFBC168		EST02149	M85633	HFBCJ74		EST02149	M85633	HFBCJ74
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1009	EST02014	M85498	HFBC178				HFBCJ84				HFBCJ84
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1011	EST02016	M85500	HFBC180				HFBCJ86				HFBCJ86
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1013	EST02018	M85502	HFBC182				HFBCJ88				HFBCJ88
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1015	EST02020	M85504	HFBC184				HFBCJ90				HFBCJ90
1016	EST02021	M85505	HFBC185				HFBCJ91				HFBCJ91
1017	EST02022	M85506	HFBC186				HFBCJ92				HFBCJ92
1018	EST02023	M85507	HFBC187				HFBCJ93				HFBCJ93
1019	EST02024	M85508	HFBC188				HFBCJ94				HFBCJ94
1020	EST02025	M85509	HFBC189				HFBCJ95				HFBCJ95
1021	EST02026	M85510	HFBC190				HFBCJ96				HFBCJ96
1022	EST02027	M85511	HFBC191				HFBCJ97				HFBCJ97
1023	EST02028	M85512	HFBC192				HFBCJ98				HFBCJ98
1024	EST02029	M85513	HFBC193				HFBCJ99				HFBCJ99
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1026	EST02031	M85515	HFBC195				HFBCJ101				HFBCJ101
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754	EST00722	M78574	HFBC69	820	EST01860	M85346	HFBCG02	886	EST01886	M85372	HFBC14
755	EST00723	M78575	HFBC72	821	EST01861	M85348	HFBCG09	887	EST01887	M85373	HFBC15
756	EST01541	M77957	HFBC77	822	EST01863	M85349	HFBCG10	888	EST01888	M85374	HFBC16
757	EST01542	M77958	HFBC77	823	EST01864	M85350	HFBCG11	889	EST01889	M85375	HFBC17
758	EST00724	M78576	HFBC77	824	EST01865	M85351	HFBCG12	890	EST01890	M85376	HFBC18
759	EST00725	M78577	HFBC78	825	EST01866	M85352	HFBCG13	891	EST01891	M85377	HFBC20
760	EST00726	M78578	HFBC80	826	EST01867	M85353	HFBCG14	892	EST01892	M85378	HFBC21
761	EST01544	M77960	HFBC82	827	EST01536	M77974	HFBCG17	893	EST01893	M85379	HFBC22
762	EST00727	M78579	HFBC83	828	EST00767	M78619	HFBCG19	894	EST01894	M85380	HFBC23
763	EST00728	M78580	HFBC84	829	EST00768	M78620	HFBCG20	895	EST01895	M85381	HFBC24
764	EST00729	M78581	HFBC85	830	EST01559	M77975	HFBCG21	896	EST01896	M85382	HFBC31
765	EST00730	M78582	HFBC86	831	EST00769	M78621	HFBCG22	897	EST01897	M85383	HFBC33
766	EST00731	M78583	HFBC87	832	EST00770	M78622	HFBCG23	898	EST01898	M85384	HFBC34
767	EST00732	M78584	HFBC88	833	EST01560	M77976	HFBCG24	899	EST01899	M85385	HFBC35
768	EST00733	M78585	HFBC90	834	EST00771	M78623	HFBCG25	900	EST01900	M85386	HFBC36
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770	EST00735	M78587	HFBC93	836	EST00773	M78625	HFBCG27	902	EST01902	M85388	HFBC38
771	EST01546	M77962	HFBC95	837	EST01561	M77977	HFBCG29	903	EST01903	M85389	HFBC39
772	EST00736	M78588	HFBC96	838	EST00774	M78626	HFBCG30	904	EST01904	M85390	HFBC42
773	EST01547	M77963	HFBC96	839	EST01562	M77978	HFBCG31	905	EST01905	M85391	HFBC43
774	EST01548	M77964	HFBC97	840	EST00775	M78627	HFBCG32	906	EST01906	M85392	HFBC45
775	EST00737	M78589	HFBC103	841	EST00776	M78628	HFBCG33	907	EST01907	M85393	HFBC46
776	EST00738	M78590	HFBC107	842	EST01563	M77979	HFBCG34	908	EST01908	M85394	HFBC50
777	EST00739	M78591	HFBC109	843	EST01564	M77980	HFBCG35	909	EST01909	M85395	HFBC56
778	EST00740	M78592	HFBC110	844	EST01565	M77981	HFBCG37	910	EST01910	M85396	HFBC57
779	EST00741	M78593	HFBC111	845	EST00777	M78629	HFBCG38	911	EST01911	M85397	HFBC58
780	EST01549	M77965	HFBC113	846	EST00778	M78630	HFBCG40	912	EST01912	M85398	HFBC60
781	EST01550	M77966	HFBC114	847	EST00779	M78631	HFBCG43	913	EST01913	M85399	HFBC61
782	EST01551	M77967	HFBC116	848	EST01566	M77982	HFBCG44	914	EST01914	M85400	HFBC62
783	EST01552	M77968	HFBC123	849	EST01567	M77983	HFBCG45	915	EST01915	M85401	HFBC63
784	EST01852	M85338	HFBC141	850	EST00780	M78632	HFBCG47	916	EST01917	M85402	HFBC65
785	EST01553	M77969	HFBC142	851	EST00781	M78633	HFBCG49	917	EST01919	M85404	HFBC68
786	EST00742	M78594	HFBC143	852	EST00782	M78634	HFBCG51	918	EST01920	M85405	HFBC70
787	EST00743	M78595	HFBC144	853	EST00783	M78635	HFBCG53	919	EST01921	M85406	HFBC71
788	EST00744	M78596	HFBC145	854	EST00784	M78636	HFBCG57	920	EST01922	M85407	HFBC72
789	EST00745	M78597	HFBC146	855	EST00785	M78637	HFBCG61	921	EST01923	M85408	HFBC73
790	EST01554	M77970	HFBC147	856	EST01568	M77984	HFBCG62	922	EST01924	M85409	HFBC74
791	EST00746	M78598	HFBC148	857	EST01868	M85354	HFBCG69	923	EST01925	M85410	HFBC76
792	EST00747	M78599	HFBC149	858	EST01869	M85355	HFBCG72	924	EST01926	M85411	HFBC77
793	EST00748	M78600	HFBC150	859	EST01870	M85356	HFBCG73	925	EST01927	M85412	HFBC78
794	EST01555	M77971	HFBC151	860	EST00786	M78638	HFBCG74	926	EST01929	M85414	HFBC81
795	EST00749	M78601	HFBC152	861	EST01871	M85357	HFBCG76	927	EST01930	M85415	HFBC82
796	EST00750	M78602	HFBC153	862	EST01872	M85358	HFBCG77	928	EST01931	M85416	HFBC84
797	EST00751	M78603	HFBC154	863	EST01873	M85359	HFBCG78	929	EST01932	M85417	HFBC86
798	EST01853	M85339	HFBC155	864	EST00787	M78639	HFBCG79	930	EST01933	M85418	HFBC87
799	EST00752	M78604	HFBC157	865	EST01569	M77985	HFBCG80	931	EST01934	M85419	HFBC89
800	EST00753	M78605	HFBC158	866	EST01874	M85360	HFBCG81	932	EST01935	M85420	HFBC92
801	EST00754	M78606	HFBC160	867	EST01875	M85361	HFBCG83	933	EST01936	M85421	HFBC93
802	EST00755	M78607	HFBC161	868	EST01876	M85362	HFBCG84	934	EST01937	M85422	HFBC94
803	EST00756	M78608	HFBC163	869	EST00788	M78640	HFBCG85	935	EST01938	M85423	HFBC95
804	EST00757	M78609	HFBC168	870	EST00789	M78641	HFBCG88	936	EST01939	M85424	HFBC96
805	EST00758	M78610	HFBC173	871	EST00790	M78642	HFBCG89	937	EST01940	M85425	HFBC101
806	EST00759	M78611	HFBC174	872	EST00791	M78643	HFBCG90	938	EST01941	M85426	HFBC102
807	EST00760	M78612	HFBC175	873	EST00792	M78644	HFBCG92	939	EST01943	M85427	HFBC105
808	EST00761	M78613	HFBC179	874	EST00793	M78645	HFBCG98	940	EST01944	M85428	HFBC106
809	EST00762	M78614	HFBC181	875	EST00794	M78646	HFBCG99	941	EST01945	M85429	HFBC108
810	EST00763	M78615	HFBC184	876	EST00795	M78647	HFBCG96				
811	EST00764	M78616	HFBC185	877	EST01877	M85363	HFBC101				
812	EST01854	M85340	HFBC187	878	EST01878	M85364	HFBC102				
813	EST00765	M78617	HFBC188	879	EST01879	M85365	HFBC103				
814	EST00766	M78618	HFBC189	880	EST01880	M85366	HFBC105				
815	EST01855	M85341	HFBC190	881	EST01881	M85367	HFBC106				
816	EST01856	M85342	HFBC191	882	EST01882	M85368	HFBC107				
817	EST01857	M85343	HFBC193	883	EST01883	M85369	HFBC108				
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566	EST00576	M78428	HFBCB94	698	EST00681	M78478	HFBCB90	732	EST00640	M78478	HFBCB90
567	EST00577	M78429	HFBCB96	699	EST00682	M78479	HFBCB91	733	EST00641	M78479	HFBCB91
568	EST00578	M78430	HFBCB01	700	EST00683	M78480	HFBCB92	734	EST00642	M78480	HFBCB92
569	EST00579	M78431	HFBCB02	701	EST01522	M77938	HFBCD91	735	EST00643	M78481	HFBCB93
570	EST00580	M78432	HFBCB03	702	EST00684	M78482	HFBCB94	736	EST01507	M77923	HFBCD86
571	EST00581	M78433	HFBCB04	703	EST00685	M78483	HFBCB95	737	EST00630	M78483	HFBCB95
572	EST00582	M78434	HFBCB06	704	EST00686	M78484	HFBCB96	738	EST00631	M78484	HFBCB96
573	EST00583	M78435	HFBCB09	705	EST00687	M78485	HFBCB97	739	EST00632	M78485	HFBCB97
574	EST00584	M78436	HFBCB11	706	EST00688	M78486	HFBCB98	740	EST01509	M77925	HFBCD87
575	EST00585	M78437	HFBCB13	707	EST01847	M85335	HFBCD02	741	EST00633	M78486	HFBCB98
576	EST00586	M78438	HFBCB14	708	EST00689	M78487	HFBCB99	742	EST00634	M78487	HFBCB99
577	EST00587	M78439	HFBCB15	709	EST00690	M78488	HFBCD00	743	EST00635	M78488	HFBCD00
578	EST00588	M78440	HFBCB16	710	EST00691	M78489	HFBCD01	744	EST00636	M78489	HFBCD01
579	EST00589	M78441	HFBCB17	711	EST00692	M78490	HFBCD02	745	EST00637	M78490	HFBCD02
580	EST00590	M78442	HFBCB18	712	EST00693	M78491	HFBCD03	746	EST00638	M78491	HFBCD03
581	EST00591	M78443	HFBCB20	713	EST00694	M78492	HFBCD04	747	EST00639	M78492	HFBCD04
582	EST00592	M78444	HFBCB21	714	EST00695	M78493	HFBCD05	748	EST00640	M78493	HFBCD05
583	EST00593	M78445	HFBCB22	715	EST01523	M77939	HFBCD12	749	EST00641	M78494	HFBCD06
584	EST00594	M78446	HFBCB23	716	EST01524	M77940	HFBCD13	750	EST00642	M78495	HFBCD07
585	EST00595	M78447	HFBCB25	717	EST01525	M77941	HFBCD14	751	EST00643	M78496	HFBCD08
586	EST00596	M78448	HFBCB26	718	EST00696	M78497	HFBCD15	752	EST00644	M78497	HFBCD09
587	EST01488	M77904	HFBCD27	719	EST01526	M77942	HFBCD16	753	EST01510	M77926	HFBCD88
588	EST00597	M78449	HFBCD28	720	EST00697	M78498	HFBCD17	754	EST01511	M77927	HFBCD89
589	EST00598	M78450	HFBCD29	721	EST00698	M78499	HFBCD18	755	EST00645	M78499	HFBCD10
590	EST00599	M78451	HFBCD30	722	EST01528	M77944	HFBCD19	756	EST00646	M78500	HFBCD11
591	EST01489	M77905	HFBCD31	723	EST00699	M78501	HFBCD20	757	EST00647	M78501	HFBCD12
592	EST00600	M78452	HFBCD32	724	EST01529	M77945	HFBCD21	758	EST00648	M78502	HFBCD13
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595	EST01840	M85331	HFBCD35	727	EST00702	M78504	HFBCD24	761	EST00651	M78505	HFBCD16
596	EST00602	M78454	HFBCD36	728	EST00703	M78505	HFBCD25	762	EST00652	M78506	HFBCD17
597	EST00603	M78455	HFBCD37	729	EST00704	M78506	HFBCD26	763	EST00653	M78507	HFBCD18
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599	EST00605	M78457	HFBCD39	731	EST00706	M78508	HFBCD28	765	EST00655	M78509	HFBCD20
600	EST01492	M77908	HFBCD40	732	EST00707	M78509	HFBCD29	766	EST00656	M78510	HFBCD21
601	EST01493	M77909	HFBCD41	733	EST00708	M78510	HFBCD30	767	EST00657	M78511	HFBCD22
602	EST00606	M78458	HFBCD42	734	EST00709	M78511	HFBCD31	768	EST00658	M78512	HFBCD23
603	EST01494	M77910	HFBCD43	735	EST00710	M78512	HFBCD32	769	EST00659	M78513	HFBCD24
604	EST00607	M78459	HFBCD44	736	EST00711	M78513	HFBCD33	770	EST00660	M78514	HFBCD25
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606	EST00609	M78461	HFBCD46	738	EST00713	M78515	HFBCD35	772	EST00662	M78516	HFBCD27
607	EST00610	M78462	HFBCD47	739	EST00714	M78516	HFBCD36	773	EST00663	M78517	HFBCD28
608	EST00611	M78463	HFBCD48	740	EST01534	M77950	HFBCD49	774	EST00664	M78518	HFBCD29
609	EST01496	M77912	HFBCD49	741	EST01535	M77951	HFBCD50	775	EST00665	M78519	HFBCD30
610	EST00612	M78464	HFBCD51	742	EST00715	M78516	HFBCD51	776	EST00666	M78520	HFBCD31
611	EST00613	M78465	HFBCD52	743	EST00716	M78517	HFBCD52	777	EST00667	M78521	HFBCD32
612	EST00614	M78466	HFBCD53	744	EST00717	M78518	HFBCD53	778	EST00668	M78522	HFBCD33
613	EST00615	M78467	HFBCD54	745	EST00718	M78519	HFBCD54	779	EST00669	M78523	HFBCD34
614	EST00616	M78468	HFBCD55	746	EST01537	M77953	HFBCD55	780	EST00670	M78524	HFBCD35
615	EST01842	M85332	HFBCD56	747	EST00719	M78520	HFBCD56	781	EST00671	M78525	HFBCD36
616	EST01497	M77913	HFBCD57	748	EST00720	M78521	HFBCD57	782	EST00672	M78526	HFBCD37
617	EST00617	M78469	HFBCD58	749	EST01539	M77955	HFBCD58	783	EST00673	M78527	HFBCD38
618	EST01498	M77914	HFBCD59	750	EST01540	M77956	HFBCD59	784	EST00674	M78528	HFBCD39
619	EST00619	M78471	HFBCD60	751	EST00721	M78522	HFBCD60	785	EST00675	M78529	HFBCD40
620	EST01499	M77915	HFBCD61	752	EST00722	M78523	HFBCD61	786	EST00676	M78530	HFBCD41
621	EST00620	M78472	HFBCD62					787	EST00677	M78531	HFBCD42
622	EST01843	M85333	HFBCD63					788	EST00678	M78532	HFBCD43
623	EST00621	M78473	HFBCD64					789	EST00679	M78533	HFBCD44
624	EST01500	M77916	HFBCD65					790	EST00680	M78534	HFBCD45
625	EST01844	M85334	HFBCD66					791	EST00681	M78535	HFBCD46
626	EST00622	M78474	HFBCD67					792	EST00682	M78536	HFBCD47
627	EST00623	M77917	HFBCD68					793	EST00683	M78537	HFBCD48
628	EST01503	M77919	HFBCD69					794	EST00684	M78538	HFBCD49
629	EST00624	M78476	HFBCD70					795	EST00685	M78539	HFBCD50

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376	EST01436	78282	HFBA32	HFBA24	509	EST01472	78384	HFBA24	HFBA24
377	EST00430	78283	HFBA33	HFBA25	510	EST00532	78385	HFBA25	HFBA25
378	EST00431	78284	HFBA34	HFBA26	511	EST00533	78386	HFBA26	HFBA26
379	EST00432	78285	HFBA35	HFBA27	512	EST00534	78387	HFBA27	HFBA27
380	EST01439	78286	HFBA36	HFBA28	513	EST00535	78388	HFBA28	HFBA28
381	EST00433	78287	HFBA37	HFBA29	514	EST00536	78389	HFBA29	HFBA29
382	EST00434	78288	HFBA38	HFBA30	515	EST00537	78390	HFBA30	HFBA30
383	EST00435	78289	HFBA39	HFBA31	516	EST00538	78391	HFBA31	HFBA31
384	EST01440	78290	HFBA40	HFBA32	517	EST00539	78392	HFBA32	HFBA32
385	EST00436	78291	HFBA41	HFBA33	518	EST00540	78393	HFBA33	HFBA33
386	EST00437	78292	HFBA42	HFBA34	519	EST00541	78394	HFBA34	HFBA34
387	EST00438	78293	HFBA43	HFBA35	520	EST00542	78395	HFBA35	HFBA35
388	EST00439	78294	HFBA44	HFBA36	521	EST01474	78396	HFBA36	HFBA36
389	EST00440	78295	HFBA45	HFBA37	522	EST00543	78397	HFBA37	HFBA37
390	EST01442	78296	HFBA46	HFBA38	523	EST00544	78398	HFBA38	HFBA38
391	EST00441	78297	HFBA47	HFBA39	524	EST00545	78399	HFBA39	HFBA39
392	EST00442	78298	HFBA48	HFBA40	525	EST00546	78400	HFBA40	HFBA40
393	EST00443	78299	HFBA49	HFBA41	526	EST00547	78401	HFBA41	HFBA41
394	EST00444	78300	HFBA50	HFBA42	527	EST00548	78402	HFBA42	HFBA42
395	EST00445	78301	HFBA51	HFBA43	528	EST00549	78403	HFBA43	HFBA43
396	EST01443	78302	HFBA52	HFBA44	529	EST01477	78404	HFBA44	HFBA44
397	EST00446	78303	HFBA53	HFBA45	530	EST00550	78405	HFBA45	HFBA45
398	EST00447	78304	HFBA54	HFBA46	531	EST00551	78406	HFBA46	HFBA46
399	EST00448	78305	HFBA55	HFBA47	532	EST00552	78407	HFBA47	HFBA47
400	EST00449	78306	HFBA56	HFBA48	533	EST01478	78408	HFBA48	HFBA48
401	EST00450	78307	HFBA57	HFBA49	534	EST00553	78409	HFBA49	HFBA49
402	EST00451	78308	HFBA58	HFBA50	535	EST00554	78410	HFBA50	HFBA50
403	EST00452	78309	HFBA59	HFBA51	536	EST00555	78411	HFBA51	HFBA51
404	EST00453	78310	HFBA60	HFBA52	537	EST00556	78412	HFBA52	HFBA52
405	EST00454	78311	HFBA61	HFBA53	538	EST00557	78413	HFBA53	HFBA53
406	EST00455	78312	HFBA62	HFBA54	539	EST00558	78414	HFBA54	HFBA54
407	EST00456	78313	HFBA63	HFBA55	540	EST00559	78415	HFBA55	HFBA55
408	EST00457	78314	HFBA64	HFBA56	541	EST00560	78416	HFBA56	HFBA56
409	EST01444	78315	HFBA65	HFBA57	542	EST00561	78417	HFBA57	HFBA57
410	EST00458	78316	HFBA66	HFBA58	543	EST00562	78418	HFBA58	HFBA58
411	EST00459	78317	HFBA67	HFBA59	544	EST00563	78419	HFBA59	HFBA59
412	EST01445	78318	HFBA68	HFBA60	545	EST00564	78420	HFBA60	HFBA60
413	EST00460	78319	HFBA69	HFBA61	546	EST00565	78421	HFBA61	HFBA61
414	EST00461	78320	HFBA70	HFBA62	547	EST00566	78422	HFBA62	HFBA62
415	EST00462	78321	HFBA71	HFBA63	548	EST00567	78423	HFBA63	HFBA63
416	EST00463	78322	HFBA72	HFBA64	549	EST00568	78424	HFBA64	HFBA64
417	EST00464	78323	HFBA73	HFBA65	550	EST00569	78425	HFBA65	HFBA65
418	EST00465	78324	HFBA74	HFBA66	551	EST00570	78426	HFBA66	HFBA66
419	EST00466	78325	HFBA75	HFBA67	552	EST00571	78427	HFBA67	HFBA67
420	EST00467	78326	HFBA76	HFBA68	553	EST00572	78428	HFBA68	HFBA68
421	EST00468	78327	HFBA77	HFBA69	554	EST00573	78429	HFBA69	HFBA69
422	EST01447	78328	HFBA78	HFBA70	555	EST00574	78430	HFBA70	HFBA70
423	EST00468	78329	HFBA79	HFBA71	556	EST00575	78431	HFBA71	HFBA71
424	EST01448	78330	HFBA80	HFBA72	557	EST00576	78432	HFBA72	HFBA72
425	EST00469	78331	HFBA81	HFBA73	558	EST00577	78433	HFBA73	HFBA73
426	EST00470	78332	HFBA82	HFBA74	559	EST00578	78434	HFBA74	HFBA74
427	EST01449	78333	HFBA83	HFBA75	560	EST00579	78435	HFBA75	HFBA75
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429	EST00472	78335	HFBA85	HFBA77	562	EST00581	78437	HFBA77	HFBA77
430	EST00473	78336	HFBA86	HFBA78	563	EST00582	78438	HFBA78	HFBA78
431	EST01452	78337	HFBA87	HFBA79					
432	EST00474	78338	HFBA88	HFBA80					
433	EST00475	78339	HFBA89	HFBA81					
434	EST00476	78340	HFBA90	HFBA82					
435	EST00477	78341	HFBA91	HFBA83					
436	EST00478	78342	HFBA92	HFBA84					
437	EST00479	78343	HFBA93	HFBA85					
438	EST00480	78344	HFBA94	HFBA86					

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183	EST00148	M62089	HHC161	318	EST00380	M78232	HEFBA04	318	EST00380	M78232	HEFBA04
184	EST00149	M62090	HHC162	319	EST00381	M78233	HEFBA07	319	EST00381	M78233	HEFBA07
185	EST00150	M62091	HHC173	320	EST00382	M78234	HEFBA07	320	EST00382	M78234	HEFBA07
186	EST00151	M62092	HHC175	321	EST00383	M78235	HEFBA09	321	EST00383	M78235	HEFBA09
187	EST00152	M62093	HHC179	322	EST00384	M78236	HEFBA10	322	EST00384	M78236	HEFBA10
188	EST00256	M62195	HHC184	323	EST00385	M78237	HEFBA11	323	EST00385	M78237	HEFBA11
189	EST00282	M62196	HHC185	324	EST01827	M85319	HEFBA13	324	EST01827	M85319	HEFBA13
190	EST00153	M62094	HHC186	325	EST00386	M78238	HEFBA13	325	EST00386	M78238	HEFBA13
191	EST00154	M62095	HHC188	326	EST00387	M78239	HEFBA18	326	EST00387	M78239	HEFBA18
192	EST00155	M62096	HHC189	327	EST00388	M78240	HEFBA18	327	EST00388	M78240	HEFBA18
193	EST00156	M62097	HHC190	328	EST00389	M78241	HEFBA21	328	EST00389	M78241	HEFBA21
194	EST00157	M62098	HHC192	329	EST00390	M78242	HEFBA23	329	EST00390	M78242	HEFBA23
195	EST00158	M62099	HHC194	330	EST00391	M78243	HEFBA23	330	EST00391	M78243	HEFBA23
196	EST00159	M62100	HHC195	331	EST00392	M78244	HEFBA23	331	EST00392	M78244	HEFBA23
197	EST00160	M62101	HHC197	332	EST00393	M78245	HEFBA24	332	EST00393	M78245	HEFBA24
198	EST00161	M62102	HHC198	333	EST00394	M78246	HEFBA24	333	EST00394	M78246	HEFBA24
199	EST00162	M62103	HHC199	334	EST00395	M78247	HEFBA24	334	EST00395	M78247	HEFBA24
200	EST00163	M62104	HHC199	335	EST00396	M78248	HEFBA24	335	EST00396	M78248	HEFBA24
201	EST00164	M62105	HHC199	336	EST00397	M78249	HEFBA24	336	EST00397	M78249	HEFBA24
202	EST00165	M62106	HHC199	337	EST00398	M78250	HEFBA24	337	EST00398	M78250	HEFBA24
203	EST00166	M62107	HHC199	338	EST00399	M78251	HEFBA24	338	EST00399	M78251	HEFBA24
204	EST00167	M62108	HHC199	339	EST00400	M78252	HEFBA24	339	EST00400	M78252	HEFBA24
205	EST00168	M62109	HHC199	340	EST00401	M78253	HEFBA24	340	EST00401	M78253	HEFBA24
206	EST00169	M62110	HHC199	341	EST00402	M78254	HEFBA24	341	EST00402	M78254	HEFBA24
207	EST00170	M62111	HHC199	342	EST00403	M78255	HEFBA24	342	EST00403	M78255	HEFBA24
208	EST00171	M62112	HHC199	343	EST00404	M78256	HEFBA24	343	EST00404	M78256	HEFBA24
209	EST00172	M62113	HHC199	344	EST01428	M79271	HEFBA24	344	EST01428	M79271	HEFBA24
210	EST00173	M62114	HHC199	345	EST00405	M78257	HEFBA24	345	EST00405	M78257	HEFBA24
211	EST00174	M62115	HHC199	346	EST00406	M78258	HEFBA24	346	EST00406	M78258	HEFBA24
212	EST00175	M62116	HHC199	347	EST01830	M85321	HEFBA24	347	EST01830	M85321	HEFBA24
213	EST00176	M62117	HHC199	348	EST01831	M85322	HEFBA24	348	EST01831	M85322	HEFBA24
214	EST00177	M62118	HHC199	349	EST01832	M85323	HEFBA24	349	EST01832	M85323	HEFBA24
215	EST00178	M62119	HHC199	350	EST01833	M85324	HEFBA24	350	EST01833	M85324	HEFBA24
216	EST00179	M62120	HHC199	351	EST00407	M78259	HEFBA24	351	EST00407	M78259	HEFBA24
217	EST00180	M62121	HHC199	352	EST00408	M78260	HEFBA24	352	EST00408	M78260	HEFBA24
218	EST00181	M62122	HHC199	353	EST00409	M78261	HEFBA24	353	EST00409	M78261	HEFBA24
219	EST00182	M62123	HHC199	354	EST00410	M78262	HEFBA24	354	EST00410	M78262	HEFBA24
220	EST00372	M62266	HHC199	355	EST00411	M78263	HEFBA24	355	EST00411	M78263	HEFBA24
221	EST00373	M62267	HHC199	356	EST00412	M78264	HEFBA24	356	EST00412	M78264	HEFBA24
222	EST00374	M62268	HHC199	357	EST00413	M78265	HEFBA24	357	EST00413	M78265	HEFBA24
223	EST00375	M62269	HHC199	358	EST00414	M78266	HEFBA24	358	EST00414	M78266	HEFBA24
224	EST00376	M62270	HHC199	359	EST00415	M78267	HEFBA24	359	EST00415	M78267	HEFBA24
225	EST00377	M62271	HHC199	360	EST00416	M78268	HEFBA24	360	EST00416	M78268	HEFBA24
226	EST00378	M62272	HHC199	361	EST00417	M78269	HEFBA24	361	EST00417	M78269	HEFBA24
227	EST00379	M62273	HHC199	362	EST00418	M78270	HEFBA24	362	EST00418	M78270	HEFBA24
228	EST00380	M62274	HHC199	363	EST00419	M78271	HEFBA24	363	EST00419	M78271	HEFBA24
229	EST00381	M62275	HHC199	364	EST00420	M78272	HEFBA24	364	EST00420	M78272	HEFBA24
230	EST00382	M62276	HHC199	365	EST00421	M78273	HEFBA24	365	EST00421	M78273	HEFBA24
231	EST00383	M62277	HHC199	366	EST00422	M78274	HEFBA24	366	EST00422	M78274	HEFBA24
232	EST00384	M62278	HHC199	367	EST00423	M78275	HEFBA24	367	EST00423	M78275	HEFBA24
233	EST00385	M62279	HHC199	368	EST00424	M78276	HEFBA24	368	EST00424	M78276	HEFBA24
234	EST00386	M62280	HHC199	369	EST00425	M78277	HEFBA24	369	EST00425	M78277	HEFBA24
235	EST00387	M62281	HHC199	370	EST00426	M78278	HEFBA24	370	EST00426	M78278	HEFBA24
236	EST00388	M62282	HHC199	371	EST00427	M78279	HEFBA24	371	EST00427	M78279	HEFBA24
237	EST00389	M62283	HHC199	372	EST00428	M78280	HEFBA24	372	EST00428	M78280	HEFBA24
238	EST00390	M62284	HHC199	373	EST00429	M78281	HEFBA24	373	EST00429	M78281	HEFBA24
239	EST00391	M62285	HHC199	374	EST00430	M78282	HEFBA24	374	EST00430	M78282	HEFBA24
240	EST00392	M62286	HHC199	375	EST00431	M78283	HEFBA24	375	EST00431	M78283	HEFBA24
241	EST00393	M62287	HHC199	376	EST00432	M78284	HEFBA24	376	EST00432	M78284	HEFBA24
242	EST00394	M62288	HHC199	377	EST00433	M78285	HEFBA24	377	EST00433	M78285	HEFBA24
243	EST00395	M62289	HHC199	378	EST00434	M78286	HEFBA24	378	EST00434	M78286	HEFBA24
244	EST00396	M62290	HHC199	379	EST00435	M78287	HEFBA24	379	EST00435	M78287	HEFBA24
245	EST00397	M62291	HHC199	380	EST00436	M78288	HEFBA24	380	EST00436	M78288	HEFBA24
246	EST00398	M62292	HHC199	381	EST00437	M78289	HEFBA24	381	EST00437	M78289	HEFBA24
247	EST00399	M62293	HHC199	382	EST00438	M78290	HEFBA24	382	EST00438	M78290	HEFBA24
248	EST00400	M62294	HHC199	383	EST00439	M78291	HEFBA24	383	EST00439	M78291	HEFBA24

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Table 12. SEQ ID NO Cross References

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
1	EST00007	M61959	HFA01	64	EST00066	M62010	HCC13	128	EST00252	M62191	HCC57	180	EST00321	M62191	HCC57	180	EST00321	M62191	HCC57
2	EST00009	M61953	HFA05	65	EST00067	M62011	HCC18	129	EST00322	M62192	HCC58	181	EST00322	M62192	HCC58	181	EST00322	M62192	HCC58
3	EST00010	M61961	HFA07	66	EST00068	M62012	HCC21	130	EST00323	M62193	HCC61	182	EST00323	M62193	HCC61	182	EST00323	M62193	HCC61
4	EST00011	M61962	HFA08	67	EST00069	M62013	HCC22	131	EST00324	M62194	HCC62	183	EST00324	M62194	HCC62	183	EST00324	M62194	HCC62
5	EST00012	M61963	HFA11	68	EST00070	M62014	HCC23	132	EST00325	M62195	HCC63	184	EST00325	M62195	HCC63	184	EST00325	M62195	HCC63
6	EST00013	M61964	HFA11	69	EST00071	M62015	HCC24	133	EST00326	M62196	HCC64	185	EST00326	M62196	HCC64	185	EST00326	M62196	HCC64
7	EST00014	M61965	HFA26	70	EST00072	M62016	HCC25	134	EST00327	M62197	HCC65	186	EST00327	M62197	HCC65	186	EST00327	M62197	HCC65
8	EST00015	M61966	HFA26	71	EST00073	M62017	HCC26	135	EST00328	M62198	HCC66	187	EST00328	M62198	HCC66	187	EST00328	M62198	HCC66
9	EST00016	M61967	HFA23	72	EST00074	M62018	HCC27	136	EST00329	M62199	HCC67	188	EST00329	M62199	HCC67	188	EST00329	M62199	HCC67
10	EST00017	M61968	HFA36	73	EST00075	M62019	HCC28	137	EST00330	M62200	HCC68	189	EST00330	M62200	HCC68	189	EST00330	M62200	HCC68
11	EST00018	M61969	HFA36	74	EST00076	M62020	HCC29	138	EST00331	M62201	HCC69	190	EST00331	M62201	HCC69	190	EST00331	M62201	HCC69
12	EST00019	M61970	HFA51	75	EST00077	M62021	HCC30	139	EST00332	M62202	HCC70	191	EST00332	M62202	HCC70	191	EST00332	M62202	HCC70
13	EST00020	M61971	HFA51	76	EST00078	M62022	HCC31	140	EST00333	M62203	HCC71	192	EST00333	M62203	HCC71	192	EST00333	M62203	HCC71
14	EST00021	M61972	HFA66	77	EST00079	M62023	HCC32	141	EST00334	M62204	HCC72	193	EST00334	M62204	HCC72	193	EST00334	M62204	HCC72
15	EST00022	M61973	HFA66	78	EST00080	M62024	HCC33	142	EST00335	M62205	HCC73	194	EST00335	M62205	HCC73	194	EST00335	M62205	HCC73
16	EST00023	M61974	HFA77	79	EST00081	M62025	HCC34	143	EST00336	M62206	HCC74	195	EST00336	M62206	HCC74	195	EST00336	M62206	HCC74
17	EST00024	M61975	HFA77	80	EST00082	M62026	HCC35	144	EST00337	M62207	HCC75	196	EST00337	M62207	HCC75	196	EST00337	M62207	HCC75
18	EST00025	M61976	HFA86	81	EST00083	M62027	HCC36	145	EST00338	M62208	HCC76	197	EST00338	M62208	HCC76	197	EST00338	M62208	HCC76
19	EST00026	M61977	HFA86	82	EST00084	M62028	HCC37	146	EST00339	M62209	HCC77	198	EST00339	M62209	HCC77	198	EST00339	M62209	HCC77
20	EST00027	M61978	HFA90	83	EST00085	M62029	HCC38	147	EST00340	M62210	HCC78	199	EST00340	M62210	HCC78	199	EST00340	M62210	HCC78
21	EST00028	M61979	HFA90	84	EST00086	M62030	HCC39	148	EST00341	M62211	HCC79	200	EST00341	M62211	HCC79	200	EST00341	M62211	HCC79
22	EST00029	M61980	HFA90	85	EST00087	M62031	HCC40	149	EST00342	M62212	HCC80	201	EST00342	M62212	HCC80	201	EST00342	M62212	HCC80
23	EST00030	M61981	HFA90	86	EST00088	M62032	HCC41	150	EST00343	M62213	HCC81	202	EST00343	M62213	HCC81	202	EST00343	M62213	HCC81
24	EST00031	M61982	HFA90	87	EST00089	M62033	HCC42	151	EST00344	M62214	HCC82	203	EST00344	M62214	HCC82	203	EST00344	M62214	HCC82
25	EST00032	M61983	HFA90	88	EST00090	M62034	HCC43	152	EST00345	M62215	HCC83	204	EST00345	M62215	HCC83	204	EST00345	M62215	HCC83
26	EST00033	M61984	HFA90	89	EST00091	M62035	HCC44	153	EST00346	M62216	HCC84	205	EST00346	M62216	HCC84	205	EST00346	M62216	HCC84
27	EST00034	M61985	HFA90	90	EST00092	M62036	HCC45	154	EST00347	M62217	HCC85	206	EST00347	M62217	HCC85	206	EST00347	M62217	HCC85
28	EST00035	M61986	HFA90	91	EST00093	M62037	HCC46	155	EST00348	M62218	HCC86	207	EST00348	M62218	HCC86	207	EST00348	M62218	HCC86
29	EST00036	M61987	HFA90	92	EST00094	M62038	HCC47	156	EST00349	M62219	HCC87	208	EST00349	M62219	HCC87	208	EST00349	M62219	HCC87
30	EST00037	M61988	HFA90	93	EST00095	M62039	HCC48	157	EST00350	M62220	HCC88	209	EST00350	M62220	HCC88	209	EST00350	M62220	HCC88
31	EST00038	M61989	HFA90	94	EST00096	M62040	HCC49	158	EST00351	M62221	HCC89	210	EST00351	M62221	HCC89	210	EST00351	M62221	HCC89
32	EST00039	M61990	HFA90	95	EST00097	M62041	HCC50	159	EST00352	M62222	HCC90	211	EST00352	M62222	HCC90	211	EST00352	M62222	HCC90
33	EST00040	M61991	HFA90	96	EST00098	M62042	HCC51	160	EST00353	M62223	HCC91	212	EST00353	M62223	HCC91	212	EST00353	M62223	HCC91
34	EST00041	M61992	HFA90	97	EST00099	M62043	HCC52	161	EST00354	M62224	HCC92	213	EST00354	M62224	HCC92	213	EST00354	M62224	HCC92
35	EST00042	M61993	HFA90	98	EST00100	M62044	HCC53	162	EST00355	M62225	HCC93	214	EST00355	M62225	HCC93	214	EST00355	M62225	HCC93
36	EST00043	M61994	HFA90	99	EST00101	M62045	HCC54	163	EST00356	M62226	HCC94	215	EST00356	M62226	HCC94	215	EST00356	M62226	HCC94
37	EST00044	M61995	HFA90	100	EST00102	M62046	HCC55	164	EST00357	M62227	HCC95	216	EST00357	M62227	HCC95	216	EST00357	M62227	HCC95
38	EST00045	M61996	HFA90	101	EST00103	M62047	HCC56	165	EST00358	M62228	HCC96	217	EST00358	M62228	HCC96	217	EST00358	M62228	HCC96
39	EST00046	M61997	HFA90	102	EST00104	M62048	HCC57	166	EST00359	M62229	HCC97	218	EST00359	M62229	HCC97	218	EST00359	M62229	HCC97
40	EST00047	M61998	HFA90	103	EST00105	M62049	HCC58	167	EST00360	M62230	HCC98	219	EST00360	M62230	HCC98	219	EST00360	M62230	HCC98
41	EST00048	M61999	HFA90	104	EST00106	M62050	HCC59	168	EST00361	M62231	HCC99	220	EST00361	M62231	HCC99	220	EST00361	M62231	HCC99
42	EST00049	M62000	HFA90	105	EST00107	M62051	HCC60	169	EST00362	M62232	HCC100	221	EST00362	M62232	HCC100	221	EST00362	M62232	HCC100
43	EST00050	M62001	HFA90	106	EST00108	M62052	HCC61	170	EST00363	M62233	HCC101	222	EST00363	M62233	HCC101	222	EST00363	M62233	HCC101
44	EST00051	M62002	HFA90	107	EST00109	M62053	HCC62	171	EST00364	M62234	HCC102	223	EST00364	M62234	HCC102	223	EST00364	M62234	HCC102
45	EST00052	M62003	HFA90	108	EST00110	M62054	HCC63	172	EST00365	M62235	HCC103	224	EST00365	M62235	HCC103	224	EST00365	M62235	HCC103
46	EST00053	M62004	HFA90	109	EST00111	M62055	HCC64	173	EST00366	M62236	HCC104	225	EST00366	M62236	HCC104	225	EST00366	M62236	HCC104
47	EST00054	M62005	HFA90	110	EST00112	M62056	HCC65	174	EST00367	M62237	HCC105	226	EST00367	M62237	HCC105	226	EST00367	M62237	HCC105
48	EST00055	M62006	HFA90	111	EST00113	M62057	HCC66	175	EST00368	M62238	HCC106	227	EST00368	M62238	HCC106	227	EST00368	M62238	HCC106
49	EST00056	M62007	HFA90	112	EST00114	M62058	HCC67	176	EST00369	M62239	HCC107	228	EST00369	M62239	HCC107	228	EST00369	M62239	HCC107
50	EST00057	M62008	HFA90	113	EST00115	M62059	HCC68	177	EST00370	M62240	HCC108	229	EST00370	M62240	HCC108	229	EST00370	M62240	HCC108
51	EST00058	M62009	HFA90	114	EST00116	M62060	HCC69	178	EST00371	M62241	HCC109	230	EST00371	M62241	HCC109	230	EST00371	M62241	HCC109
52	EST00059	M62010	HFA90	115	EST00117	M62061	HCC70	179	EST00372	M62242	HCC110	231	EST00372	M62242	HCC110	231	EST00372	M62242	HCC110
53	EST00060	M62011	HFA90	116	EST00118	M62062	HCC71	180	EST00373	M62243	HCC111	232	EST00373	M62243	HCC111	232	EST00373	M62243	HCC111
54	EST00061	M62012	HFA90	117	EST00119	M62063	HCC72	181	EST00374	M62244	HCC112	233	EST00374	M62244	HCC112	233	EST00374	M62244	HCC112
55	EST00062	M62013	HFA90	118	EST00120	M62064	HCC73	182	EST00375	M62245	HCC113	234	EST00375	M62245	HCC113	234	EST00375	M62245	HCC113
56	EST00063	M62014	HFA90	119	EST00121	M62065	HCC74	183	EST00376	M62246	HCC114	235	EST00376	M62246	HCC114	235	EST00376	M62246	HCC114
57	EST00064	M62015	HFA90	120	EST00122	M62066	HCC75	184	EST00377	M62247	HCC115	236	EST00377	M62247	HCC115	236	EST00377	M62247	HCC115
58	EST00065	M62016	HFA90	121	EST00123	M62067	HCC76	185	EST00378	M62248	HCC116	237	EST00378	M62248	HCC116	237	EST00378	M62248	HCC116
59	EST00066	M62017	HFA90	122	EST00124	M62068	HCC77	186	EST00379	M62249	HCC117	238	EST00379	M62249	HCC117	238	EST00379	M62249	HCC117
60	EST00067	M62018	HFA90	123	EST00125	M62069	HCC78	187	EST00380	M62250	HCC118	239	EST00380	M62250	HCC118	239	EST00380	M62250	HCC118
61	EST00068	M62019	HFA90	124	EST00126	M62070	HCC79	188	EST00381	M62251	HCC119	240	EST00381	M62251	HCC119	240	EST00381	M62251	HCC119
62	EST00069	M62020	HFA90	125	EST00127	M62071	HCC80	189	EST00382	M62252	HCC120	241	EST00382	M62252	HCC120	241	EST00382	M62252	HCC120
63	EST00070	M62021	HFA90	126	EST00128	M62072	HCC81	190	EST00383	M62253	HCC121	242	EST00383	M62253	HCC121	242	EST00383	M62253	HCC121

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differentiated tumor tissue that has metastasized to foreign bodily sites.

The entire contents of all references cited above are hereby incorporated by reference.

5 While the present invention has been described in some detail for purposes of clarity and understanding, one skilled in the art will appreciate that various changes in form and detail can be made without departing from the true scope of the invention.

10

VII. Correlation of EST and Clone Identifiers

15 The EST sequences of the present invention are identified herein by SEQ ID NO, and are identified in the GenBank database by a different number, are identified in the inventors' lab (and upcoming publications) by EST number, and clones have been submitted to the American Type Culture Collection (Rockville, Maryland USA) under clone names. Table 12 cross references those different numbers for the ESTs from cDNA, SEQ ID NOS 1-2409.

20

Certain Sequence ID NOS are excluded from some claims based on their homology to known non-human sequences (See Table 2).

range of amounts of polyacrylamide in a set of gels to resolve the entire molecular weight range of proteins to be detected in the sample. A size marker is run in parallel for purposes of estimating molecular weights of the constituent proteins. Sample size for analysis is a convenient volume of from 5-50 μ l, and containing from about 1 to 100 μ g protein. An aliquot of each of the resolved proteins is transferred by blotting to a nitrocellulose filter paper, a process that maintains the pattern of resolution. Multiple copies are prepared. The procedure, known as Western Blot Analysis, is well described in Davis, L. et al., (above) Section 19-3. One set of nitrocellulose blots is stained with Coomassie Blue dye to visualize the entire set of proteins for comparison with the antibody bound proteins. The remaining nitrocellulose filters are then incubated with a solution of one or more specific antisera to tissue specific proteins prepared as described in Example 26. In this procedure, as in procedure A above, appropriate positive and negative sample and reagent controls are run.

In either procedure A or B, a detectable label can be attached to the primary tissue antigen-primary antibody complex according to various strategies and permutations thereof. In a straightforward approach, the primary specific antibody can be labeled; alternatively, the unlabeled complex can be bound by a labeled secondary anti-IgG antibody. In other approaches, either the primary or secondary antibody is conjugated to a biotin molecule, which can, in a subsequent step, bind an avidin conjugated marker. According to yet another strategy, enzyme labeled or radioactive protein A, which has the property of binding to any IgG, is bound in a final step to either the primary or secondary antibody.

The visualization of tissue specific antigen binding at levels above those seen in control tissues to one or more tissue specific antibodies, prepared from the gene sequences identified from EST sequences, can identify tissues of unknown origin, for example, forensic samples, or

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Treated sections are incubated in a humid chamber for 30 min at room temperature, rinsed, then washed in buffer for 30-45 min. Excess fluid is blotted away, and the marker developed.

5 If the tissue specific antibody was not labeled in the first incubation, it can be labeled at this time in a second antibody-antibody reaction, for example, by adding fluorescein- or enzyme-conjugated antibody against the immunoglobulin class of the antiserum-producing species, for
10 example, fluorescein labeled antibody to mouse IgG. Such labeled sera are commercially available.

15 The antigen found in the tissues by the above procedure can be quantified by measuring the intensity of color or fluorescence on the tissue section, and calibrating that signal using appropriate standards.

B. Identification of Tissue Specific Soluble Proteins

20 The visualization of tissue specific proteins and identification of unknown tissues from that procedure is carried out using the labeled antibody reagents and detection strategy as described for immunohistochemistry; however the sample is prepared according to an electrophoretic technique to distribute the proteins extracted from the tissue in an orderly array on the basis of molecular weight for detection.

25 A tissue sample is homogenized using a Virtis apparatus; cell suspensions are disrupted by Dounce homogenization or osmotic lysis, using detergents in either case as required to disrupt cell membranes, as is the practice in the art. Insoluble cell components such as nuclei, microsomes, and membrane fragments are removed by ultracentrifugation, and
30 the soluble protein-containing fraction concentrated if necessary and reserved for analysis.

35 A sample of the soluble protein solution is resolved into individual protein species by conventional SDS polyacrylamide electrophoresis as described, for example, by Davis, L. et al., Section 19-2 in: *Basic Methods in Molecular Biology* (P. Leder, ed), Elsevier, New York (1986), using a

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A. Immunohistochemical Techniques

Purified, high-titer antibodies, prepared as described above, are conjugated to a detectable marker, as described, for example, by Fudenberg, H., Chap. 26 in: **Basic & Clinical Immunology**, 3rd Ed. Lange, Los Altos, California (1980) or Rose, N. et al., Chap. 12 in: **Methods in Immunodiagnosis**, 2d Ed. John Wiley & Sons, New York (1980).

A fluorescent marker, either fluorescein or rhodamine, is preferred, but antibodies can also be labeled with an enzyme that supports a color producing reaction with a substrate, such as horseradish peroxidase. Markers can be added to tissue-bound antibody in a second step, as described below. Alternatively, the specific antitissue antibodies can be labeled with ferritin or other electron dense particles, and localization of the ferritin coupled antigen-antibody complexes achieved by means of an electron microscope. In yet another approach, the antibodies are radiolabeled, with, for example ^{125}I , and detected by overlaying the antibody treated preparation with photographic emulsion.

Preparations to carry out the procedures can comprise monoclonal or polyclonal antibodies to a single gene copy or protein, identified as specific to a tissue type, for example, brain tissue, or antibody preparations to several antigenically distinct tissue specific antigens can be used in panels, independently or in mixtures, as required.

Tissue sections and cell suspensions are prepared for immunohistochemical examination according to common histological techniques. Multiple cryostat sections (about 4 μm , unfixed) of the unknown tissue and known control, are mounted and each slide covered with different dilutions of the antibody preparation. Sections of known and unknown tissues should also be treated with preparations to provide a positive control, a negative control, for example, pre-immune sera, and a control for non-specific staining, for example, buffer.

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determined by preparing competitive binding curves, as described, for example, by Fisher, D., Chap. 42 in: **Manual of Clinical Immunology**, 2d Ed. (Rose and Friedman, eds.) Amer. Soc. For Microbiol., Washington, D.C. (1980).

5 Antibody preparations prepared according to either protocol are useful in quantitative immunoassays which determine concentrations of antigen-bearing substances in biological samples; they are also used semi-quantitatively or qualitatively to identify the presence of antigen in a
10 biological sample.

EXAMPLE 27

Identification of Tissue Types or Cell Species by Means of Labeled Tissue Specific Antibodies

15 Identification of specific tissues is accomplished by the visualization of tissue specific antigens by means of antibody preparations according to Example 26 which are conjugated, directly or indirectly to a detectable marker.
20 Selected labeled antibody species bind to their specific antigen binding partner in tissue sections, cell suspensions, or in extracts of soluble proteins from a tissue sample to provide a pattern for qualitative or semi-qualitative interpretation.

25 Antisera for these procedures must have a potency exceeding that of the native preparation, and for that reason, antibodies are concentrated to a mg/ml level by isolation of the gamma globulin fraction, for example, by ion-exchange chromatography or by ammonium sulfate
30 fractionation. Also, to provide the most specific antisera, unwanted antibodies, for example to common proteins, must be removed from the gamma globulin fraction, for example by means of insoluble immunoabsorbents, before the antibodies are labeled with the marker. Either monoclonal or
35 heterologous antisera is suitable for either procedure.

microtiter plate where growth of the culture is continued. Antibody-producing clones are identified by detection of antibody in the supernatant fluid of the wells by immunoassay procedures, such as Elisa, as originally described by Engvall, E., *Meth. Enzymol.* 70:419 (1980), and derivative methods thereof. Selected positive clones can be expanded and their monoclonal antibody product harvested for use. Detailed procedures for monoclonal antibody production are described in Davis, L. et al. **Basic Methods in Molecular Biology** Elsevier, New York. Section 21-2.

B. Polyclonal Antibody Production by Immunization

Polyclonal antiserum containing antibodies to heterogenous epitopes of a single protein can be prepared by immunizing suitable animals with the expressed protein described above, which can be unmodified or modified to enhance immunogenicity. Effective polyclonal antibody production is affected by many factors related both to the antigen and the host species. For example, small molecules tend to be less immunogenic than other and may require the use of carriers and adjuvant. Also, host animals vary in response to site of inoculations and dose, with both inadequate or excessive doses of antigen resulting in low titer antisera. Small doses (ng level) of antigen administered at multiple intradermal sites appears to be most reliable. An effective immunization protocol for rabbits can be found in Vaitukaitis, J. et al. *J. Clin. Endocrinol. Metab.* 33:988-991 (1971).

Booster injections can be given at regular intervals, and antiserum harvested when antibody titer thereof, as determined semi-quantitatively, for example, by double immunodiffusion in agar against known concentrations of the antigen, begins to fall. See, for example, Ouchterlony, O. et al., Chap. 19 in: **Handbook of Experimental Immunology** D. Wier (ed) Blackwell (1973). Plateau concentration of antibody is usually in the range of 0.1 to 0.2 mg/ml of serum (about 12 μ M). Affinity of the antisera for the antigen is

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and the polyadenylation signal incorporated into the construct increases the level of expression. These techniques as described are well known to those skilled in the art of molecular biology. Standard methods are published in methods texts such as Davis et al. and many of the methods are available from the technical assistance representatives from Stratagene, Life Technologies, Inc., or Promega. Polypeptide may additionally be produced from either construct using in vitro translation systems such as In vitro Express™ Translation Kit (Stratagene).

Example 26

Production of an Antibody to a Human Protein

Substantially pure protein or polypeptide is isolated from the transfected or transformed cells as described in Example 25. Concentration of protein in the final preparation is adjusted, for example, by concentration on an Amicon filter device, to the level of a few micrograms/ml. Monoclonal or polyclonal antibody to the protein can then be prepared as follows:

A. Monoclonal Antibody Production by Hybridoma Fusion

Monoclonal antibody to epitopes of any of the peptides identified and isolated as described can be prepared from murine hybridomas according to the classical method of Kohler, G. and Milstein, C., *Nature* 256:495 (1975) or derivative methods thereof. Briefly, a mouse is repetitively inoculated with a few micrograms of the selected protein over a period of a few weeks. The mouse is then sacrificed, and the antibody producing cells of the spleen isolated. The spleen cells are fused by means of polyethylene glycol with mouse myeloma cells, and the excess unfused cells destroyed by growth of the system on selective media comprising aminopterin (HAT media). The successfully fused cells are diluted and aliquots of the dilution placed in wells of a

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includes the Herpes Simplex Thymidine Kinase promoter and the selectable neomycin gene. The cDNA is obtained by PCR from the bacterial vector using oligonucleotide primers complementary to the cDNA and containing restriction endonuclease sequences for Pst I incorporated into the 5' primer and BglII at the 5' end of the corresponding cDNA 3' primer, taking care to ensure that the cDNA is positioned inframe with the poly A sequence. The purified fragment obtained from the resulting PCR reaction is digested with PstI, blunt ended with an exonuclease, digested with Bgl II, purified and ligated to pXT1, now containing a poly A sequence and digested BglII.

The ligated product is transfected into mouse NIH 3T3 cells using Lipofectin (Life Technologies, Inc., Grand Island, New York) under conditions outlined in the product specification. Positive transfectants are selected after growing the transfected cells in 600ug/ml G418 (Sigma, St. Louis, Missouri). The protein is preferably released into the supernatant. However if the protein has membrane binding domains, the protein may additionally be retained within the cell or expression may be restricted to the cell surface.

Since it may be necessary to purify and locate the transfected product, synthetic 15-mer peptides synthesized from the predicted cDNA sequence are injected into mice to generate antibody to the polypeptide encoded by the cDNA.

If antibody production is not possible, the cDNA sequence is additionally incorporated into eukaryotic expression vectors and expressed as a chimeric with, for example, β -globin. Antibody to β -globin is used to purify the chimeric. Corresponding protease cleavage sites engineered between the β -globin gene and the cDNA are then used to separate the two polypeptide fragments from one another after translation. One useful expression vector for generating β -globin chimerics is pSG5 (Stratagene). This vector encodes rabbit β -globin. Intron II of the rabbit β -globin gene facilitates splicing of the expressed transcript,

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with a particular function. The cell functions can also be predicted based on the presence of abnormal physiologies within cells derived from individuals with a particular inherited disease, particularly when the EST is associated with the disease using techniques described in Example 22.

EXAMPLE 25

Gene expression from DNA Sequences Corresponding to ESTs

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A gene sequence of the present invention coding for all or part of a human gene product is introduced into an expression vector using conventional technology. (Techniques to transfer cloned sequences into expression vectors that direct protein translation in mammalian, yeast, insect or bacterial expression systems are well known in the art.) Commercially available vectors and expression systems are available from a variety of suppliers including Stratagene (La Jolla, California), Promega (Madison, Wisconsin), and Invitrogen (San Diego, California). If desired, to enhance expression and facilitate proper protein folding, the codon context and codon pairing of the sequence may be optimized for the particular expression organism, as explained by Hatfield, et al., U.S. Patent No. 5,082,767, incorporated herein by this reference.

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The following is provided as one exemplary method to generate polypeptide from cloned cDNA sequences. The cDNA from the EST of interest is sequenced to identify the methionine initiation codon for the gene and the poly A sequence. If the cDNA lacks a poly A sequence, this sequence can be added to the construct by, for example, splicing out the Poly A sequence from pSG5 (Stratagene) using BglI and SalI restriction endonuclease enzymes and incorporating it into the mammalian expression vector pXT1 (Stratagene). pXT1 contains the LTRs and a portion of the gag gene from Moloney Murine Leukemia Virus. The position of the LTRs in the construct allow efficient stable transfection. The vector

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expression in individuals having diseases associated with a particular gene. Similarly, a portion of the EST or corresponding gene sequence can be used to study the effect of inhibiting transcription of a particular gene within a cell. Traditionally, homopurine sequences were considered the most useful. However, homopyrimidine sequences can also inhibit gene expression. Thus, both types of sequences from either the EST or from the gene corresponding to the EST are contemplated within the scope of this invention. Homopyrimidine oligonucleotides bind to the major groove at homopurine:homopyrimidine sequences. As an example, 10-mer to 20-mer homopyrimidine sequences from the ESTs can be used to inhibit expression from homopurine sequences. SEQ ID NOS such as 282, 888, 719, 670, 994, 240, 873 and 761 contain homopyrimidine 15-mers. Moreover the natural (beta) anomers of the oligonucleotide units can be replaced with alpha anomers to render the oligonucleotide more resistant to nucleases. Further, an intercalating agent such as ethidium bromide, or the like, can be attached to the 3' end of the alpha oligonucleotide to stabilize the triple helix. For information on the generation of oligonucleotides suitable for triple helix formation see Griffin et al. (*Science* 245:967-971 (1989), which is hereby incorporated by this reference).

The oligonucleotides may be prepared on an oligonucleotide synthesizer or they may be purchased commercially from a company specializing in custom oligonucleotide synthesis. The sequences are introduced into cells in culture using techniques known in the art that include but are not limited to calcium phosphate precipitation, DEAE-Dextran, electroporation, liposome-mediated transfection or native uptake. Treated cells are monitored for altered cell function. These cell functions are predicted based upon the homologies of the gene, corresponding to the EST from which the oligonucleotide was derived, with known genes sequences that have been associated

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procedures known in the art. The molecules are introduced onto cell samples at a number of different concentrations preferably between $1 \times 10^{-10} \text{M}$ to $1 \times 10^{-4} \text{M}$. Once the minimum concentration that can adequately control translation is identified, the optimized dose is translated into a dosage suitable for use in vivo. For example, an inhibiting concentration in culture of 1×10^{-7} translates into a dose of approximately 0.6 mg/kg bodyweight. Levels of oligonucleotide approaching 100 mg/kg bodyweight or higher may be possible after testing the toxicity of the oligonucleotide in laboratory animals.

The antisense can be introduced into the body as a bare or naked oligonucleotide, oligonucleotide encapsulated in lipid, oligonucleotide sequence encapsidated by viral protein, or as oligonucleotide contained in an expression vector such as those described in Example 25. The antisense oligonucleotide is preferably introduced into the vertebrate by injection. It is additionally contemplated that cells from the vertebrate are removed, treated with the antisense oligonucleotide, and reintroduced into the vertebrate. It is further contemplated that the antisense oligonucleotide sequence is incorporated into a ribozyme sequence to enable the antisense to bind and cleave its target. For technical applications of ribozyme and antisense oligonucleotides see Rossi et al.

EXAMPLE 24

Preparation and use of Triple Helix Probes

Triple helix oligonucleotides are used to inhibit transcription from a genome. They are particularly useful for studying alterations in cell activity as it is associated with a particular gene. The EST sequences or complete sequences of the present invention or, more preferably, a portion of those sequences, can be used to inhibit gene

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protein subunit from patients with Angelman's disease (Am. J. Hum. Genet. 49:330-337, (1991)). It is likely that other genes will additionally be associated with the disease.

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EXAMPLE 23**Preparation and Use of Antisense Oligonucleotides**

Antisense RNA molecules are known to be useful for
10 regulating translation within the cell. Antisense RNA
molecules can be produced from EST sequences or from the
corresponding gene sequences. These antisense molecules can
be used as diagnostic probes to determine whether or not a
particular gene is expressed in a cell. Similarly, the
15 antisense molecules can be used as a therapeutic to regulate
gene expression once the EST is associated with a particular
disease (see Example 22).

The antisense molecules are obtained from a nucleotide
sequence by reversing the orientation of the coding region
20 with regard to the promoter. Thus, the antisense RNA is
complementary to the corresponding mRNA. For a review of
antisense design see Green et al., Ann. Rev. Biochem. 55:569-
597 (1986), which is hereby incorporated by reference. The
antisense sequences can contain modified sugar phosphate
25 backbones to increase stability and make them less sensitive
to RNase activity. Examples of the modifications are
described by Rossi et al., Pharmacol. Ther. 50(2):245-254,
(1991).

Antisense molecules are introduced into cells that
30 express the gene corresponding to the EST of interest in
culture. In a preferred application of this invention, the
polypeptide encoded by the gene is first identified, so that
the effectiveness of antisense inhibition on translation can
be monitored using techniques that include but are not
35 limited to antibody-mediated tests such as RIAs and ELISA,
functional assays, or radiolabelling. The antisense molecule
is introduced into the cells by diffusion or by transfection

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from normal patients is essential for providing gene or other therapies for AD patients.

Genetic diseases are not always accompanied by gene deletions. Therefore, it is also important to use the ESTs that bind to bands 15q11q13 from AD patients as tools to identify the polymorphisms present within the disease population. Restriction fragment length polymorphism (RFLP) analysis can be performed on patient cells from AD disease or from somatic cell hybrids created using the long arm of chromosome 15. For a review of RFLP techniques see Donis-Keller et al. (Cell 51:319-337 (1987) hereby incorporated by reference). DNA is isolated from the somatic cell lines or from cells from AD patients. The DNA is digested with one or more restriction enzymes according to techniques of Donis-Keller et al. The resulting fragments are separated by gel electrophoresis, denatured, transferred to nitrocellulose and hybridized with the selected radio-labeled ESTs that localize to the region of interest. The autoradiographic pattern is compared both to a number of AD patients and to normal patients. Common patterns of EST hybridization in AD patients that are not present in normal patients indicates that the genes associated with these ESTs are candidate genes affected by AD.

cDNA libraries are prepared from the somatic cell hybrids from AD patients. Libraries are prepared using Lambda Zap II Library Kits (Stratagene, La Jolla, California) or other commercially available library kits. The ESTs of interest are used as probes to identify those bacterial colonies carrying genes corresponding to the EST probes. Positive clones are sequenced and the sequences are compared to homologous gene sequences derived from normal patients.

Alterations, including deletions and substitutions, within gene sequences, associated with bands 15q11q13, are thus positively identified and associated with AD disease. Wagstaff et al. were able to identify deletions and substitutions in sequences encoding the GABA_A receptor

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EXAMPLE 22

Identification of a gene associated with
Angelman's disease

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Angelman's disease (AD) is characterized by deletions on the long arm of chromosome 15 (15q11q13) (Williams et al. Am. J. Med. Genet. 32:339-345 (1989) hereby incorporated by reference). The symptoms of the disease include developmental delay, seizures, inappropriate laughter and ataxic movements. These symptoms suggest that the disorder is a neurologic deficiency. This prophetic example illustrates how ESTs, preferably obtained from a cDNA library from human brain, may be used in identifying the defective gene or genes associated with Angelman's Disease. (The example is based on analogous work with genomic DNA, rather than cDNA and ESTs, in identifying the genetic defect associated with Angelman's Disease.) This example also illustrates how EST sequences may generally be used for identifying gene sequences associated with an inherited disease that is mapped to a chromosome location.

ESTs are screened using techniques described in Example 5 and Example 7 to identify those ESTs that localize to the long arm of chromosome 15 and preferably localize to chromosome 15 bands 15q11q13 from normal patients. ESTs that bind to the long arm of chromosome 15 are hybridized to chromosome 15 from AD patients. These studies are preferably performed using either fluorescence in situ hybridization or using somatic cell hybrids that contain fragments from the long arm of chromosome 15 from AD patients. Those chromosome 15-specific ESTs that do not map to chromosome 15 from AD patients are useful as markers for Angelman's Disease and can be incorporated into diagnostics for genetic screening. These ESTs are associated with chromosome deletions present in Angelman's disease. Identification of the gene associated with these AD negative ESTs and an analysis of the polypeptides encoded by the genes

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and separated on 0.8% agarose gels. The gels are transferred using Southern blotting techniques onto nitrocellulose.

10 ng of each of the oligos are pooled and end-labeled with P^{32} . The nitrocellulose is prehybridized with blocking solution and hybridized with the labeled probes. Following hybridization and washing, the nitrocellulose filter is exposed to X-Omat AR X-ray film. The resulting hybridization pattern will be unique for each individual.

It is additionally contemplated within this example that the representative number of EST sequences can be varied for additional accuracy or clarity.

EXAMPLE 21

Identification of genes associated with hereditary diseases

This example illustrates an approach useful for the association of EST sequences with particular phenotypic characteristics. In this example, a particular EST is used as a test probe to associate that EST with a particular phenotypic characteristic.

An EST clone corresponding to EST01643, (SEQ ID NO 1894) maps to a gene rich region of chromosome 6. EST clone HHCMH89, from which EST01643 was derived, was mapped to chromosome 6p21 by Dr. Julie Korenberg of UCLA/Cedar Sinai Hospital using FISH. A search of Mendelian Inheritance in Man (supra) revealed 6p21 to be a very gene rich region containing several known genes and several diseases for which genes have not been identified. The cDNA encoded by EST clone HHCMH89 thus becomes an immediate candidate for each of these genetic diseases.

Cells from patients with these diseases are isolated and expanded in culture. PCR primers from the EST sequences are used to screen genomic DNA and RNA or cDNA from the patients. ESTs that are not amplified in the patients can be positively associated with a particular disease by further analysis.

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NOS provided in Table 7 onto nitrocellulose or the like using a vacuum dot blot manifold (BioRad, Richmond California). The nitrocellulose filter containing the EST clone sequences is baked or UV linked to the filter, prehybridized and hybridized with labeled probe using techniques known in the art (Davis et al. supra). The ^{32}P labeled DNA fragments are sequentially hybridized with successively stringent conditions to detect minimal differences between the 30 bp sequence and the DNA. Tetramethylammonium chloride is useful for identifying clones containing small numbers of nucleotide mismatches (Wood et al., Proc. Natl. Acad. Sci. USA 82(6):1585-1588 (1985) which is hereby incorporated by reference. A unique pattern of dots distinguishes one individual from another individuals.

EXAMPLE 20

Alternative "Fingerprint" Identification Technique

EST sequences and the corresponding complete cDNA sequences can be used to create a unique fingerprint for an individual. Thus pools of EST sequences can be used in forensics, paternity suits or the like to differentiate one individual from another.

Entire EST sequences can be used; similarly oligonucleotides can be prepared from EST sequences. In this example, 20-mer oligonucleotides are prepared from 200 EST sequences using commercially available oligonucleotide services such as Oligos Etc., Wilsonville, OR. Patient cell samples are processed for DNA using techniques well known to those with skill in the art. The nucleic acid is digested with restriction enzymes EcoRI and XbaI. Following digestion, samples are applied to wells for electrophoresis. The procedure, as known in the art, may be modified to accommodate polyacrylamide electrophoresis, however in this example, samples containing 5 ug of DNA are loaded into wells

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blotting see Davis et al. (Basic Methods in Molecular Biology, 1986, Elsevier Press. pp 62-65).

A panel of ESTs or complete cDNA sequences from Examples 1, 2, and/or 13, or fragments thereof of at least 15 bases, are radioactively or colorimetrically labeled using end-labeled oligonucleotides derived from the ESTs, nick translated sequences or the like using methods known in the art and hybridized to the Southern blot using techniques known in the art (Davis et al., supra). Preferably, at least 5 to 10 of these labeled probes are used, and more preferably at least about 20 or 30 are used to provide a unique pattern. The resultant bands appearing from the hybridization of a large sample of ESTs will be a unique identifier. Since the restriction enzyme cleavage will be different for every individual, the band pattern on the Southern blot will also be unique. Increasing the number of EST probes will provide a statistically higher level of confidence in the identification since there will be an increased number of sets of bands used for identification.

EXAMPLE 19

Dot Blot Identification Procedure

Another technique for identifying individuals using the sequences disclosed herein utilizes a dot blot hybridization technique.

Genomic DNA is isolated from nuclei of subject to be identified. Oligonucleotide probes of approximately 30 bp in length were synthesized that correspond to sequences from the ESTs. The probes are used to hybridize to the genomic DNA through conditions known to those in the art. The oligonucleotides are end labelled with P^{32} using polynucleotide kinase (Pharmacia). Dot Blots are created by spotting about 50 ng cDNA of at least 10, preferably at least 50 sequences corresponding to a variety of the Sequence ID

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of 100 bases in length are used to prove identity between the suspect and the sample.

EXAMPLE 17

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Positive Identification by DNA Sequencing

The technique outlined in the previous example may also be used on a larger scale to provide a unique fingerprint-type identification of any individual. In this technique, primers are prepared from a large number of sequences from Examples 1, 2, 11, 12 and/or 13. Preferably, 20 to 50 different primers are used. These primers are used to obtain a corresponding number of PCR-generated DNA segments from the individual in question in accordance with Example 15. Each of these DNA segments is sequenced, using the methods set forth in Example 1. The database of sequences generated through this procedure uniquely identifies the individual from whom the sequences were obtained. The same panel of primers may then be used at any later time to absolutely correlate tissue or other biological specimen with that individual.

EXAMPLE 18

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Southern Blot Forensic Identification

The procedure of Example 17 is repeated to obtain a panel of from 10 to 2000 amplified sequences from an individual and a specimen. This PCR-generated DNA is then digested with one or a combination of, preferably, four base specific restriction enzymes. Such enzymes are commercially available and known to those of skill in the art. After digestion, the resultant gene fragments are size separated in multiple duplicate wells on an agarose gel and transferred to nitrocellulose using Southern blotting techniques well known to those with skill in the art. For a review of Southern

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present invention, to prepare PCR primers for a variety of applications. The PCR primers are preferably at least 15 bases, and more preferably at least 18 bases in length. The procedure of Example 5 is repeated using the desired EST, or
5 using the corresponding cDNA or genomic DNA sequence from Example 13. It is preferred that the primer pairs have approximately the same G/C ratio, so that melting temperatures are approximately the same. When screening cDNA, introns are of no concern; however, when screening
10 genomic DNA, primers should be selected to avoid reading across introns, which usually are too large to amplify. The PCR primers and amplified DNA of this Example find use in the Examples that follow.

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EXAMPLE 16**Forensic Matching by DNA Sequencing**

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In one exemplary method, DNA samples are isolated from forensic specimens of, for example, hair, semen, blood or skin cells by conventional methods. A panel of PCR primers derived from a number of the sequences of Example 1, 2, 11, 12 and/or 13 is then utilized in accordance with Example 12 to obtain DNA of approximately 100-200 bases in length from the forensic specimen. Corresponding sequences are obtained from a suspect. Each of these identification DNAs is then sequenced, and a simple database comparison determines the differences, if any, between the sequences from the suspect and those from the sample. Statistically significant differences between the suspect's DNA sequences and those from the sample conclusively prove a lack of identity. This lack of identity can be proven, for example, with only one sequence. Identity, on the other hand, should be demonstrated with a large number of sequences, all matching. Preferably, a minimum of 50 statistically identical sequences

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software from Applied Biosystems, Inc. (Foster City, CA). In this way, the complete insert from these four cDNA clones was sequenced on both strands to an average redundancy between three and four (each base was sequenced between three and four times, on average). Those complete insert sequences are disclosed herein as SEQ ID 2418, 2419, 2420, and 2421, corresponding to original ESTs with SEQ ID 223, 189, 227, and 188, respectively.

EXAMPLE 14

Determining Reading Frame, Orientation, Coding Regions: ESTs and Complete cDNA Sequences

Once the complete cDNA sequence has been determined in accordance with Example 13, the reading frame, orientation, and coding regions are determined by computer techniques. (The complete coding region is considered to be the largest open reading frame from a methionine to a stop codon.)

Specifically, the CRM program on the GMAIL server is used as explained in Example 9 to determine probable coding regions. This information is supplemented by location of start and stop codons. Where possible, the results of the CRM analysis are validated by comparison of the cDNA sequence to known sequences using database matching, in accordance with Examples 3 and 4. If a match of 50% (or even less) is found in any particular reading frame and orientation, this serves to verify corresponding CRM results. Alternatively, database matches can be used to determine reading frame and orientation without use of the CRM program. Of course, if the cDNA is derived from a directional library, the probable orientation is already known.

EXAMPLE 15

Preparation of PCR Primers and Amplification of DNA

The EST sequences and the corresponding cDNA sequences and genomic sequences may be used, in accordance with the

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sequence was confirmed by sequencing PCR products. SEQ ID NO 2410, includes a partial exon of one of these genes.

EXAMPLE 13

5 Complete Sequence of EST Clone Inserts

There are a number of methods known to those with skill in the art of molecular biology, to obtain sequence information from the cDNAs corresponding to the EST sequences. Procedures for these methods are provided in Basic Methods in Molecular Biology (David et al. *supra*). One way to acquire more information about the cDNA from which an EST was derived is to sequence the remainder of the cDNA clone. The complete sequence of the inserts of four EST clones (representing SEQ ID NOs 188, 189, 223, and 227) was determined using Exonuclease III deletions. Briefly, EST clones were digested with the restriction enzymes SalI and KpnI or PstI and BamHI (for deletions from the Forward primer and Reverse primer ends of the insert, respectively). The KpnI and PstI enzymes leave 3' sticky ends following digestion, which Exonuclease III is unable to bind. This results in unidirectional deletions into the cDNA insert leaving the vector sequence undisturbed. After addition of Exonuclease III to the Forward and Reverse deletion reactions, aliquots of the reaction were removed at defined time intervals and the reaction was stopped to prevent further deletion. S1 nuclease and Klenow DNA polymerase were added to create blunt ended fragments suitable for ligation.

Samples for each time point was purified by electrophoresis through an agarose gel and religated. Two to four representative clones from each time point in each direction were sequenced to give between 200 and 400 base pairs of sequence data. Careful selection of deletion conditions and time points allow a deletion series of approximately 100-200 base pairs difference in length at each consecutive time point. Sequence fragments were reassembled into a redundant contiguous sequence using the INHERIT

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When multiple cosmids or YAC clones were used as the source DNA, a pool of specific expressed exons was obtained as a cDNA library. The EST/cDNAs sequenced from this specific library are disclosed herein as SEQ ID NOS: 2412-2417.

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EXAMPLE 12**PCR Amplification from Predicted Exons**

10 Computational analyses can be applied to genomic DNA sequences to predict protein coding regions. The coding region prediction program CRM (E. Uberbacher and R. Mural, Proc. Natl. Acad. Sci. USA 88:11261-5 (1991)) finds open reading frames and classifies them according to their probability of being coding regions. These regions are subsequently examined using the GM program (C. Fields and C. Soderlund, Comp. Applic. Biosci. 6: 263, 1990), which predicts intron-exon structure. PCR primers are then designed to amplify the predicted exons and used to test human cDNA libraries (for example, fetal brain or placental libraries) for the presence of these putative exons using a PCR assay.

20 This strategy has been successfully applied in two large scale genomic sequencing projects, the Huntington's locus of human chromosome 4p16.3 (McCombie, et al., submitted) and human chromosome locus 19q13.3 (Martin-Gallardo, et al., submitted). Sequences from eleven predicted exons from chromosome 4 were present in tested cDNA libraries, indicating that this region has at least two and probably three expressed genes. In one case, the method resulted in an amplification product which spanned two predicted exons. (SEQ ID NO: 2411.) When sequenced, this PCR product indicated the presence of the two exons from which the primers were initially chosen, as well as an intervening exon which was also predicted by the CRM program, but not the intervening genomic sequences. In a similar fashion, the presence of the two predicted genes in the chromosome 19

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EXAMPLE 11

cDNA Libraries Generated From Specific Genomic DNA
by Exon Expression & Amplification

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Exon amplification was used to express potential exons from genomic DNA in a recombinant vector that contains some of the signals necessary for splicing. If an exon is present in the proper orientation in the vector, that exon will be spliced in a mammalian cell and will become part of the mRNA of that cell. The exon splice-product can be purified from other mRNA in the cell by conversion of the mRNA to cDNA and selective amplification of the recombinant splice-product cDNAs. Cosmid DNA from human chromosome 19q13.3 was digested with BamHI or BamHI/BglIII restriction enzymes. The fragments generated were collected and size specifically cloned into an expression vector (Buckler, et al. Proc. Nat'l. Acad. Sci. USA, 88:4005-4009 (1991)). After transfection by electroporation of these constructs into COS cells, RNA transcripts were generated using the SV40 early promoter and a polyadenylation signal derived from SV40 both present in the expression vector. When a fragment of genomic DNA contains an entire exon with flanking intron sequence in the sense orientation, the exon should be retained in the mature poly(A)+ cytoplasmic RNA. Therefore, the mRNA was used as template for cDNA synthesis using reverse transcriptase and vector-priming. Subsequently, the cDNAs were amplified by vector-priming using PCR. A fraction of this first PCR product was reamplified using internal vector-primers containing terminal cloning sites. These products were end-repaired with T4 DNA polymerase, digested with the appropriate restriction enzymes, gel purified and cloned into pBluescript vectors. The constructs were transfected into XL1-Blue competent cells and plated on LB/X-gal/IPTG/ampicillin plates. White colonies were selected and expanded to prepare DNA templates as described in Example 2.

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<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2092	EST01700	TP	Anion exchanger homolog AE3
1956	EST01663	TP	Ca ²⁺ -transporting ATPase 2
1039	EST02055	TP	Calcium channel
1667	EST00825	TP	Gamma-aminobutyric acid transporter
1412	EST02446	TP	Glutamate-aspartate carrier protein
913	EST01913	TT	Clathrin coat assembly protein AP50 homolog
1035	EST02051	TT	J1 protein
93	EST00287	TT	Processing enhancing protein
38	EST00374	TT	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	TT	Ribosomal protein L18a
1856	EST01627	TT	Ribosomal protein L1a
1974	EST01667	TT	Ribosomal protein L3
301	EST00300	TT	Ribosomal protein L30
22	EST00301	TT	Ribosomal protein S10
2402	EST01826	TT	Ribosomal protein S10
463	EST01459	TT	Ribosomal protein YL10
2121	EST01711	TT	Valine-tRNA ligase
1332	EST02362	TX	GA binding protein, beta subunit
1229	EST02258	TX	KUP protein
1395	EST02429	TX	Nuclear factor 1-like protein (NF1)
187	EST00152	TX	Wilm's tumor-related protein
249	EST00275	TX	Zinc Finger Proteins
413	EST01446	TX	Zinc Finger Proteins
469	EST01460	TX	Zinc Finger Proteins
833	EST01560	TX	Zinc Finger Proteins
1230	EST02259	TX	Zinc finger proteins
1496	EST02534	TX	Zinc finger proteins
2324	EST01352	TX	Zinc Finger Proteins

Group Key: CS: Cell Surface, DC: Developmental Control, EM: Energy Metabolism, KP: Kinases and Phosphatases, OG: Oncogenes, OM: Other Metabolism, PI, Peptidases and Peptidase Inhibitors, RT: Receptors, SC: Structural and Cytoskeletal, ST: Signal Transduction, TP: Transporters, TT: Transcription, Translation, and Subcellular Localization, TX: Transcription Factors.

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2254	EST01751	OM	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
1654	EST01572	OM	Protochlorophyllide reductase
2073	EST01697	OM	Succinate dehydrogenase flavoprotein
2138	EST01715	OM	Succinate dehydrogenase flavoprotein
1771	EST01601	OM	Thiosulfate sulfurtransferase (rhodanese)
2173	EST01724	PI	Lon protease
2297	EST01775	PI	Prohormone cleavage enzyme
9	EST00376	PI	Prolyl endopeptidase
1726	EST01588	PI	XPR2 alkaline extracellular protease
1147	EST02169	PP	Tyrosine kinase
2282	EST01764	RT	Lamin B receptor
189	EST00282	RT	trkB
251	EST00370	SC	Actin, other
2146	EST01218	SC	Actin, other
248	EST00271	SC	Actinin, alpha
891	EST01891	SC	Actinin, alpha
1500	EST02538	SC	Actinin, alpha
132	EST00110	SC	Agrin
1852	EST01625	SC	Agrin
2004	EST01676	SC	Cofilin
650	EST00642	SC	Dilute (myosin heavy chain)
2217	EST01738	SC	Gelation factor ABP-280
77	EST00257	SC	Kinesin
78	EST00258	SC	Kinesin
2245	EST01748	SC	Kinesin
1468	EST02505	SC	Matrin 3
223	EST00368	SC	Microtubule-associated protein 1B
824	EST01865	SC	Microtubule-associated protein 1B
2032	EST01683	SC	Microtubule-associated protein 1B
506	EST01471	SC	Neuraxin
951	EST01960	SC	Spectrin, beta
1371	EST02402	SC	Talin
653	EST01512	SC	Tubulin, alpha
311	EST00270	SC	Tubulin, beta
594	EST01490	SC	Tubulin, beta
757	EST01542	SC	Tubulin, beta
1245	EST02274	SC	Tubulin, beta
1589	EST02634	SC	Tubulin, beta
1701	EST00853	SC	Unc-104
969	EST01982	ST	ADP-ribosylation factor 1
1126	EST02146	ST	Calbindin D28
1910	EST01645	ST	Calmodulin
161	EST00247	ST	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	ST	MARCKS homolog
1386	EST02418	ST	MARCKS homolog
1931	EST01041	ST	cAMP-regulated phosphoprotein
1413	EST02447	ST	cAMP-specific phosphodiesterase
299	EST00249	ST	smg p25A GDP dissociation inhibitor

Table 11: Thirteen-Class Functional Groupings of ESTs

<u>SEO ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
208	EST00250	CS	60K filarial antigen
2320	EST01784	CS	60K filarial antigen
1965	EST01664	CS	Amyloid A4
2068	EST01694	CS	Amyloid A4
2408	EST00244	CS	Amyloid A4
1880	EST01634	CS	Axonal glycoprotein TAG-1
1885	EST01639	CS	Histocompatibility antigen modifier 1
313	EST00276	CS	Lysosomal membrane glycoprotein 1 (LAMP-1)
2017	EST01678	CS	Milk fat globule membrane protein
1567	EST02610	CS	Neural cell adhesion molecule L1
2368	EST01389	CS	Radial spoke protein 3
2089	EST01699	CS	Sperm membrane protein
1277	EST02306	DC	Bib protein
188	EST00256	DC	Enhancer of split
43	EST00371	DC	Maternal G10 protein
1704	EST01580	DC	Myeloid differentiation primary response gene MyD1
227	EST00259	DC	Notch/Xotch
952	EST01961	DC	Notch/Xotch
346	EST01828	DC	Orthodentical homeotic protein
1408	EST02442	DC	Seven in absentia
97	EST00289	EM	Aconitase
310	EST00377	EM	Fo ATPase beta subunit, mitochondrial
485	EST01466	KP	Calmodulin-dependent protein kinase, type II, beta
993	EST02007	KP	Kinase 5 protein
1069	EST02087	KP	Protein kinase C, zeta
1933	EST01650	KP	Protein phosphatase 2A beta subunit
202	EST00298	KP	Protein-tyrosine phosphatase LRP
1348	EST02378	KP	cAMP-dependent protein kinase inhibitor
2302	EST01779	OG	Discs-large tumor suppressor
2353	EST01806	OG	Prohibitin
1478	EST02515	OG	Rab5
300	EST00232	OG	Transforming protein (dbI)
37	EST00038	OG	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	OG	rho H12/ ARH12
1834	EST01620	OM	AMP deaminase, brain
691	EST00675	OM	Alcohol dehydrogenase
396	EST01443	OM	CDPdiacylglycerol-serine O-phosphatidyltransferase
2192	EST01257	OM	Diacylglycerol kinase, lymphocyte
1441	EST02477	OM	Diamine acetyltransferase
2289	EST01325	OM	Fatty acid synthase
1020	EST02034	OM	Glutaminase
2326	EST01791	OM	Inositol-1,4,5-trisphosphate 3-kinase
1427	EST02463	OM	Long-chain-fatty-acid-CoA ligase
2226	EST01744	OM	NAD(P)+ transhydrogenase (B-specific)
1566	EST02609	OM	Neutrophil oxidase factor
1681	EST01573	OM	Nucleoside diphosphate kinase

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1371	EST02402	S	Talin
1701	EST00853	S	Unc-104

Group Key: M: Metabolic, R: Regulatory, S: Structural

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202	EST00298	R	Protein-tyrosine phosphatase LRP
1478	EST02515	R	Rab5
1408	EST02442	R	Seven in absentia
300	EST00232	R	Transforming protein (dbl)
1147	EST02169	R	Tyrosine kinase
1348	EST02378	R	cAMP-dependent protein kinase inhibitor
1931	EST01041	R	cAMP-regulated phosphoprotein
1413	EST02447	R	cAMP-specific phosphodiesterase
37	EST00038	R	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	R	rho H12/ ARH12
299	EST00249	R	smg p25A GDP dissociation inhibitor
189	EST00282	R	trkB
1332	EST02362	R	GA binding protein, beta subunit
1277	EST02306	R	Bib protein
43	EST00371	R	Maternal G10 protein
1704	EST01580	R	Myeloid differentiation primary response gene My
346	EST01828	R	Otd homeotic protein
187	EST00152	R	Wilm's tumor-related protein
249	EST00275	R	Zinc Finger Proteins
413	EST01446	R	Zinc Finger Proteins
469	EST01460	R	Zinc Finger Proteins
833	EST01560	R	Zinc Finger Proteins
1230	EST02259	R	Zinc finger proteins
1496	EST02534	R	Zinc finger proteins
2324	EST01352	R	Zinc Finger Proteins
208	EST00250	S	60K filarial antigen
2320	EST01784	S	60K filarial antigen
251	EST00370	S	Actin, other
2146	EST01218	S	Actin, other
248	EST00271	S	Actinin, alpha
891	EST01891	S	Actinin, alpha
1500	EST02538	S	Actinin, alpha
132	EST00110	S	Agrin
1852	EST01625	S	Agrin
1965	EST01664	S	Amyloid A4
2068	EST01694	S	Amyloid A4
2408	EST00244	S	Amyloid A4
1880	EST01634	S	Axonal glycoprotein TAG-1
2004	EST01676	S	Cofilin
650	EST00642	S	Dilute (myosin heavy chain)
2217	EST01738	S	Gelation factor ABP-280
1885	EST01639	S	Histocompatibility antigen modifier 1
77	EST00257	S	Kinesin
SEQ ID	EST#	Group	Putative Identification
78	EST00258	S	Kinesin
2245	EST01748	S	Kinesin
313	EST00276	S	Lysosomal membrane glycoprotein 1 (LAMP-1)
223	EST00368	S	Microtubule-associated protein 1B
824	EST01865	S	Microtubule-associated protein 1B
2032	EST01683	S	Microtubule-associated protein 1B
2017	EST01678	S	Milk fat globule membrane protein
1567	EST02610	S	Neural cell adhesion molecule L1
506	EST01471	S	Neuraxin
2368	EST01389	S	Radial spoke protein 3
951	EST01960	S	Spectrin, beta
2089	EST01699	S	Sperm membrane protein
653	EST01512	S	Tubulin, alpha
311	EST00270	S	Tubulin, beta
594	EST01490	S	Tubulin, beta
757	EST01542	S	Tubulin, beta
1245	EST02274	S	Tubulin, beta
1589	EST02634	S	Tubulin, beta
1468	EST02505	S	Matrin 3

Table 10: Thr e-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification
1834	EST01620	M	AMP deaminase, brain
97	EST00289	M	Aconitase
691	EST00675	M	Alcohol dehydrogenase
2092	EST01700	M	Anion exchanger homolog AE3
396	EST01443	M	CDPdiacylglycerol-serine O-phosphatidyltransferase
1956	EST01663	M	Ca ²⁺ -transporting ATPase 2
1039	EST02055	M	Calcium channel
2192	EST01257	M	Diacylglycerol kinase, lymphocyte
1441	EST02477	M	Diamine acetyltransferase
2289	EST01325	M	Fatty acid synthase
310	EST00377	M	Fo ATPase beta subunit, mitochondrial
1667	EST00825	M	Gamma-aminobutyric acid transporter
1412	EST02446	M	Glutamate-aspartate carrier protein
1020	EST02034	M	Glutaminase
2326	EST01791	M	Inositol-1,4,5-trisphosphate 3-kinase
2173	EST01724	M	Lon protease
1427	EST02463	M	Long-chain-fatty-acid-CoA ligase
2226	EST01744	M	NAD(P) ⁺ transhydrogenase (B-specific)
1566	EST02609	M	Neutrophil oxidase factor
1681	EST01573	M	Nucleoside diphosphate kinase
2254	EST01751	M	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
93	EST00287	M	Processing enhancing protein
2297	EST01775	M	Prohormone cleavage enzyme
9	EST00376	M	Prolyl endopeptidase
1654	EST01572	M	Protochlorophyllide reductase
38	EST00374	M	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	M	Ribosomal protein L18a
1856	EST01627	M	Ribosomal protein L1a
1974	EST01667	M	Ribosomal protein L3
301	EST00300	M	Ribosomal protein L30
22	EST00301	M	Ribosomal protein S10
2402	EST01826	M	Ribosomal protein S10
463	EST01459	M	Ribosomal protein YL10
2073	EST01697	M	Succinate dehydrogenase flavoprotein
2138	EST01715	M	Succinate dehydrogenase flavoprotein
1771	EST01601	M	Thiosulfate sulfurtransferase (rhodanese)
2121	EST01711	M	Valine-tRNA ligase
1726	EST01588	M	XPR2 alkaline extracellular protease
913	EST01913	M	Clathrin coat assembly protein AP50 homolog
1035	EST02051	M	J1 protein
969	EST01982	R	ADP-ribosylation factor 1
1126	EST02146	R	Calbindin D28
1910	EST01645	R	Calmodulin
485	EST01466	R	Calmodulin-dependent protein kinase, type II, beta
2302	EST01779	R	Discs-large tumor suppressor
188	EST00256	R	Enhancer of split
1229	EST02258	R	KUP protein
993	EST02007	R	Kinase 5 protein
2282	EST01764	R	Lamin B receptor
SEQ ID	EST#	Group	Putative Identification
161	EST00247	R	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	R	MARCKS homolog
1386	EST02418	R	MARCKS homolog
227	EST00259	R	Notch/Kotch
952	EST01961	R	Notch/Kotch
1395	EST02429	R	Nuclear factor 1-like protein (NF1)
2353	EST01806	R	Prohibitin
1069	EST02087	R	Protein kinase C, zeta
1933	EST01650	R	Protein phosphatase 2A beta subunit

EXAMPLE 10

Functional Groupings of ESTs and Corresponding Genes

By matching new human ESTs to known sequences from other species, the apparent function of the gene corresponding to the EST can be ascertained. The data generated in Example 3 and 4 have been used to categorize 127 of the ESTs of the present invention, and their corresponding genes, into predicted functional groups. (These 127 are ESTs with database matches to sequences from other species for which a function was known.) Two different grouping schemes have been used.

The first scheme separates the sequences into three broad categories: metabolic; regulatory; and structural. These groupings are set out in Table 10.

The second grouping scheme separates the sequences into 13 specific categories: cell surface proteins; developmental control; energy metabolism; kinases and phosphatases; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. These groupings are set out in Table 11.

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<u>SEQ</u>	<u>ID#</u>	<u>EST#</u>
2389		EST01407
2391		EST01415
2392		EST01416
2395		EST01419
2397		EST01421
2401		EST01424
2403		EST01425
2404		EST01426
2406		EST02713
2409		EST00273

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1907	EST01022	2016	EST01110	2118	EST01194	2223	EST01742	2332	EST01794
1908	EST01023	2018	EST01111	2119	EST01195	2224	EST01277	2333	EST01357
1909	EST01024	2019	EST01112	2122	EST01197	2228	EST01280	2335	EST01359
1911	EST02694	2020	EST01113	2123	EST01713	2229	EST01281	2336	EST01360
1912	EST01025	2021	EST01114	2124	EST01198	2231	EST01746	2337	EST01361
1913	EST01646	2022	EST01115	2125	EST01199	2237	EST01288	2340	EST01802
1915	EST01027	2023	EST01116	2126	EST01200	2238	EST01289	2341	EST01364
1916	EST01028	2025	EST01118	2127	EST01201	2239	EST01290	2343	EST01366
1917	EST01029	2026	EST01119	2129	EST01203	2240	EST01291	2344	EST01367
1918	EST02695	2027	EST01120	2130	EST01204	2241	EST01747	2349	EST01372
1919	EST01030	2028	EST01121	2132	EST01206	2242	EST01292	2350	EST02708
1920	EST01031	2029	EST01682	2133	EST01207	2243	EST01293	2352	EST01374
1921	EST01647	2030	EST01122	2135	EST01209	2244	EST01294	2356	EST01377
1922	EST01032	2033	EST01684	2137	EST01211	2246	EST01295	2357	EST01378
1923	EST01033	2034	EST01124	2139	EST01716	2247	EST01296	2360	EST01381
1924	EST01034	2035	EST01125	2140	EST01212	2249	EST01298	2361	EST01382
1925	EST01035	2036	EST01126	2142	EST01214	2251	EST01300	2363	EST01384
1926	EST01036	2037	EST01686	2143	EST01215	2252	EST01750	2364	EST01385
1927	EST01037	2038	EST01127	2147	EST01219	2253	EST01301	2365	EST01386
1929	EST01039	2039	EST01128	2148	EST01220	2256	EST02718	2366	EST01387
1932	EST01042	2040	EST01129	2151	EST01223	2257	EST01303	2369	EST01811
1934	EST01043	2042	EST01688	2152	EST01224	2258	EST01754	2370	EST01390
1935	EST01044	2045	EST01133	2154	EST01226	2260	EST01305	2371	EST01391
1936	EST01045	2047	EST01135	2156	EST01718	2261	EST01755	2372	EST01392
1937	EST01652	2048	EST01136	2157	EST01719	2262	EST01306	2375	EST01815
1938	EST01654	2049	EST01689	2158	EST01228	2264	EST01308	2376	EST01395
1941	EST01047	2050	EST01137	2159	EST01229	2265	EST01309	2377	EST01396
1942	EST01048	2052	EST01139	2160	EST01230	2268	EST01311	2379	EST01398
1943	EST01049	2053	EST01140	2162	EST01232	2269	EST01312	2380	EST01399
1945	EST01051	2054	EST01141	2163	EST01233	2270	EST01313	2381	EST01400
1946	EST02696	2055	EST01690	2164	EST01234	2271	EST01314	2382	EST01401
1947	EST01052	2057	EST01143	2165	EST01720	2272	EST01762	2383	EST01402
1948	EST01053	2061	EST01147	2166	EST01236	2273	EST01315	2384	EST01403
1950	EST01055	2062	EST02701	2167	EST01237	2275	EST01316	2385	EST01816
1951	EST01056	2063	EST01148	2169	EST01722	2276	EST01317	2386	EST01404
1952	EST01057	2065	EST01691	2170	EST01239	2277	EST01318	2387	EST01405
1955	EST01662	2066	EST01692	2171	EST01240	2278	EST01319		
1957	EST01059	2067	EST01693	2172	EST01241	2279	EST01320		
1958	EST01060	2069	EST01150	2175	EST01243	2280	EST01763		
1959	EST01061	2070	EST01151	2177	EST01245	2284	EST01323		
1963	EST01063	2072	EST01152	2178	EST01726	SEQ ID#	EST#		
1964	EST01064	2074	EST01698	2179	EST01246				
1966	EST01065	2075	EST01153	2180	EST01247	2285	EST01768		
1968	EST01067	2076	EST02702	2181	EST01248	2287	EST01770		
1969	EST01068	2077	EST01154	SEQ ID#	EST#	2288	EST01324		
1970	EST01666	2078	EST01155			2290	EST01772		
1971	EST01069	2079	EST01156	2182	EST01249	2291	EST01773		
1972	EST01070	2080	EST01157	2183	EST01250	2292	EST01326		
1975	EST01073	SEQ ID#	EST#	2185	EST01252	2293	EST01327		
1976	EST01074	2081	EST01158	2186	EST01253	2294	EST01328		
1978	EST01076	2082	EST01159	2187	EST01727	2295	EST01329		
1979	EST01077	2083	EST01160	2188	EST01254	2296	EST01330		
SEQ ID#	EST#	2084	EST01161	2190	EST01728	2298	EST01331		
1980	EST01078	2085	EST01162	2191	EST01256	2299	EST01332		
1981	EST01079	2086	EST01163	2193	EST01258	2301	EST01334		
1983	EST01081	2087	EST01164	2194	EST01729	2304	EST01780		
1984	EST01082	2088	EST01166	2195	EST01259	2305	EST01336		
1985	EST01083	2089	EST01168	2197	EST01261	2306	EST01337		
1986	EST01084	2091	EST01170	2198	EST01730	2310	EST01341		
1988	EST01085	2093	EST01171	2199	EST01262	2311	EST01342		
1989	EST01086	2095	EST01701	2200	EST01731	2312	EST01343		
1995	EST01092	2096	EST01172	2201	EST01263	2313	EST01344		
1996	EST01093	2097	EST01173	2202	EST01732	2315	EST01346		
1998	EST01095	2098	EST01174	2205	EST01735	2316	EST01782		
1999	EST01096	2099	EST01175	2206	EST01736	2317	EST01347		
2002	EST01099	2103	EST01179	2208	EST01267	2318	EST01348		
2003	EST01675	2104	EST01180	2209	EST02717	2319	EST01349		
2005	EST01100	2107	EST01183	2210	EST01268	2321	EST01350		
2006	EST01101	2108	EST01184	2211	EST01269	2322	EST01351		
2007	EST01102	2109	EST01185	2213	EST01271	2323	EST01789		
2009	EST01677	2110	EST01186	2215	EST01273	2325	EST01353		
2010	EST01104	2111	EST01187	2218	EST01274	2327	EST01354		
2011	EST01105	2112	EST01188	2219	EST01275	2328	EST01355		
2014	EST01108	2113	EST01189	2220	EST01740	2329	EST01792		
2015	EST01109	2114	EST01190	2221	EST01741	2330	EST01793		
		2115	EST01191	2222	EST01276	2331	EST01356		

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992	EST02006	1086	EST02105	1184	EST02209	1274	EST02303	1363	EST02394
994	EST02008	1087	EST02106	1185	EST02210	1275	EST02304	1364	EST02395
997	EST02011	1088	EST02107	1186	EST02211	1276	EST02305	1366	EST02397
999	EST02013	1091	EST02110	1187	EST02212	1278	EST02307	1367	EST02398
1001	EST02015	1093	EST02112	1188	EST02213	1279	EST02308	1368	EST02399
1002	EST02016	1095	EST02114	1189	EST02214	1280	EST02309	1370	EST02401
1003	EST02017	1097	EST02116	1190	EST02215	1281	EST02310	1372	EST02403
1005	EST02019	1098	EST02117	1191	EST02216	1282	EST02311	1373	EST02404
1006	EST02020	1100	EST02119	1192	EST02217	1283	EST02312	1375	EST02406
1008	EST02022	1101	EST02120	1193	EST02218	1284	EST02313	1376	EST02407
1009	EST02023	1102	EST02121	1194	EST02219	1286	EST02316	1377	EST02408
1010	EST02024	1104	EST02123	1195	EST02220	1288	EST02318	1378	EST02409
1011	EST02025	1106	EST02125	1197	EST02222	1289	EST02319	1379	EST02410
1012	EST02026	1107	EST02126	1198	EST02223	1290	EST02320	1380	EST02411
1013	EST02027	1108	EST02127	1199	EST02224	1291	EST02321	1381	EST02413
1014	EST02028	1109	EST02128	1200	EST02226	1292	EST02322	1382	EST02414
1015	EST02029	1110	EST02129	1201	EST02228	1293	EST02323		
1016	EST02030	1111	EST02131	1202	EST02229	1294	EST02324		
1017	EST02031	1112	EST02132	1203	EST02230	1295	EST02325		
1019	EST02033	1114	EST02134	1204	EST02232	1296	EST02326		
1022	EST02036	1117	EST02137	1206	EST02234	SEQ ID#	EST#		
1023	EST02037	1119	EST02139	1207	EST02235				
1024	EST02038	1120	EST02140	1208	EST02236	1298	EST02328		
1025	EST02040	1121	EST02141	1209	EST02237	1299	EST02329		
1026	EST02041	1122	EST02142	SEQ ID#	EST#	1300	EST02330		
1027	EST02042	1123	EST02143			1302	EST02332		
1028	EST02043	1124	EST02144	1211	EST02239	1303	EST02333		
1029	EST02044	1125	EST02145	1212	EST02240	1304	EST02334		
1030	EST02045	SEQ ID#	EST#	1213	EST02241	1305	EST02335		
1032	EST02048			1214	EST02242	1306	EST02336		
1033	EST02049	1127	EST02147	1215	EST02244	1307	EST02337		
1036	EST02052	1128	EST02148	1216	EST02245	1309	EST02339		
SEQ ID#	EST#	1130	EST02150	1217	EST02246	1310	EST02340		
1037	EST02053	1131	EST02151	1218	EST02247	1311	EST02341		
1038	EST02054	1132	EST02152	1219	EST02248	1313	EST02343		
1040	EST02056	1135	EST02155	1220	EST02249	1314	EST02344		
1042	EST02058	1136	EST02156	1221	EST02250	1315	EST02345		
1044	EST02060	1137	EST02157	1223	EST02252	1316	EST02346		
1045	EST02061	1138	EST02159	1225	EST02254	1317	EST02347		
1046	EST02062	1140	EST02162	1226	EST02255	1318	EST02348		
1048	EST02064	1142	EST02164	1227	EST02256	1319	EST02349		
1049	EST02065	1143	EST02165	1232	EST02261	1320	EST02350		
1050	EST02066	1144	EST02166	1234	EST02263	1321	EST02351		
1051	EST02067	1145	EST02167	1235	EST02264	1322	EST02352		
1052	EST02068	1148	EST02170	1236	EST02265	1323	EST02353		
1053	EST02069	1149	EST02171	1237	EST02266	1325	EST02355		
1054	EST02070	1150	EST02172	1238	EST02267	1326	EST02356		
1055	EST02071	1152	EST02174	1239	EST02268	1327	EST02357		
1056	EST02072	1153	EST02175	1240	EST02269	1328	EST02358		
1057	EST02073	1154	EST02176	1241	EST02270	1329	EST02359		
1058	EST02074	1155	EST02177	1242	EST02271	1330	EST02360		
1059	EST02075	1156	EST02178	1244	EST02273	1333	EST02363		
1060	EST02076	1157	EST02180	1246	EST02275	1334	EST02364		
1061	EST02078	1158	EST02181	1247	EST02276	1335	EST02365		
1062	EST02079	1159	EST02182	1248	EST02277	1336	EST02366		
1063	EST02081	1160	EST02183	1249	EST02278	1337	EST02367		
1064	EST02082	1161	EST02184	1250	EST02279	1338	EST02368		
1065	EST02083	1162	EST02185	1251	EST02280	1339	EST02369		
1066	EST02084	1164	EST02188	1252	EST02281	1342	EST02372		
1067	EST02085	1165	EST02189	1253	EST02282	1343	EST02373		
1068	EST02086	1166	EST02190	1254	EST02283	1345	EST02375		
1070	EST02088	1167	EST02191	1255	EST02284	1346	EST02376		
1071	EST02089	1168	EST02193	1256	EST02285	1347	EST02377		
1072	EST02090	1169	EST02194	1257	EST02286	1349	EST02379		
1073	EST02091	1170	EST02195	1258	EST02287	1350	EST02380		
1074	EST02092	1171	EST02196	1259	EST02288	1351	EST02381		
1075	EST02093	1172	EST02197	1260	EST02289	1352	EST02382		
1076	EST02094	1173	EST02198	1261	EST02290	1353	EST02383		
1077	EST02096	1174	EST02199	1262	EST02291	1354	EST02384		
1078	EST02097	1175	EST02200	1263	EST02292	1355	EST02385		
1079	EST02098	1176	EST02201	1268	EST02297	1357	EST02387		
1080	EST02099	1177	EST02202	1269	EST02298	1358	EST02388		
1082	EST02101	1178	EST02203	1270	EST02299	1359	EST02390		
1084	EST02103	1179	EST02204	1271	EST02300	1360	EST02391		
1085	EST02104	1180	EST02205	1272	EST02301	1361	EST02392		
		1182	EST02207	1273	EST02302	1362	EST02393		

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498	EST01467	600	EST01492	697	EST00680	799	EST00752	894	EST01894
499	EST01468	601	EST01493	698	EST00681	800	EST00753	895	EST01895
500	EST00527	603	EST01494	701	EST01522	801	EST00754	896	EST01896
501	EST02715	604	EST00607	702	EST00684	804	EST00757	897	EST01897
502	EST01469	605	EST00608	703	EST00685	805	EST00758	898	EST01898
507	EST00530	609	EST01496	704	EST00686	806	EST00759	899	EST01899
508	EST00531	610	EST00612	705	EST00687	807	EST00760	900	EST01900
509	EST01472	611	EST00613	706	EST00688	809	EST00762	901	EST01901
510	EST00532	612	EST00614	708	EST00689	810	EST00763	902	EST01902
511	EST00533	615	EST00616	709	EST00690	811	EST00764	903	EST01903
512	EST00534	616	EST01497	710	EST00691	813	EST00765	904	EST01904
513	EST00535	618	EST01498	711	EST00692	814	EST00766	905	EST01905
514	EST00536	620	EST01499	712	EST00693	815	EST01855	906	EST01906
515	EST00537	622	EST01843	713	EST00694	816	EST01856	908	EST01908
519	EST00541	623	EST00621	714	EST00695	817	EST01857	909	EST01909
520	EST00542	624	EST01500	715	EST01523	818	EST01858	910	EST01910
521	EST01474	625	EST01844	716	EST01524	819	EST01859	911	EST01911
523	EST01838	627	EST00623	717	EST01525	820	EST01860	914	EST01914
525	EST00545	628	EST01503	718	EST00696	822	EST01863	915	EST01915
527	EST00547	629	EST00624	719	EST01526	825	EST01866	916	EST01917
528	EST00548	630	EST01505	720	EST00697	826	EST01867	917	EST01919
530	EST01477	631	EST00625	721	EST01527	827	EST01558	918	EST01920
531	EST00550	632	EST00626	722	EST01528	828	EST00767	920	EST01922
533	EST00552	633	EST00627	723	EST00698	830	EST01559	921	EST01923
534	EST01478	634	EST00628	725	EST00699	831	EST00769	922	EST01924
535	EST00553	636	EST01507	728	EST00702	832	EST00770	923	EST01925
536	EST01479	637	EST00630	730	EST00704	837	EST01561	925	EST01927
537	EST00554	638	EST00631	731	EST00705	838	EST00774	926	EST01929
538	EST00555	640	EST01509	732	EST00706	839	EST01562	927	EST01930
539	EST00556	641	EST00633	733	EST00707	840	EST00775	928	EST01931
541	EST00558	643	EST00635	734	EST00708	841	EST00776	931	EST01934
542	EST01480	645	EST00637	735	EST00709	842	EST01563	932	EST01935
543	EST00559	646	EST00638	736	EST01532	843	EST01564	933	EST01936
544	EST00560	647	EST00639	737	EST00710	844	EST01565	934	EST01937
545	EST01481	648	EST00640	739	EST01534	846	EST00778	937	EST01940
547	EST00561	649	EST00641	740	EST01535	847	EST00779	939	EST01943
548	EST00562	651	EST00643	741	EST00712	848	EST01566	SEQ ID#	EST#
550	EST00564	652	EST01510	744	EST01537	849	EST01567	940	EST01944
553	EST00566	654	EST00644	746	EST00716	850	EST00780	941	EST01945
555	EST01483	655	EST00645	748	EST01850	851	EST00781	942	EST01947
556	EST00568	656	EST01513	749	EST00719	SEQ ID#	EST#	943	EST01948
558	EST01484	658	EST00647	750	EST01539	853	EST00783	944	EST01949
560	EST01485	659	EST00648	751	EST01540	855	EST00785	945	EST01950
561	EST00571	661	EST00650	754	EST00722	856	EST01568	946	EST01953
562	EST00572	662	EST00651	SEQ ID#	EST#	857	EST01868	947	EST01954
563	EST00573	663	EST00652	756	EST01541	858	EST01869	949	EST01958
564	EST00574	664	EST00653	758	EST00724	859	EST01870	950	EST01959
565	EST00575	665	EST00654	761	EST01544	860	EST00786	953	EST01962
566	EST00576	SEQ ID#	EST#	762	EST00727	861	EST01871	954	EST01963
567	EST00577	666	EST01514	763	EST00728	863	EST01873	956	EST01968
568	EST00578	667	EST00655	765	EST00730	864	EST00787	957	EST01969
569	EST00579	668	EST00656	766	EST00731	865	EST01569	958	EST01970
SEQ ID#	EST#	669	EST00657	767	EST00732	866	EST01874	959	EST01972
571	EST00581	670	EST00658	768	EST00733	867	EST01875	960	EST01973
572	EST00582	671	EST00659	770	EST00735	868	EST01876	961	EST01974
574	EST00584	672	EST00660	771	EST01546	869	EST00788	962	EST01975
575	EST00585	673	EST01515	772	EST00736	870	EST00789	963	EST01976
577	EST00587	674	EST01516	774	EST01548	871	EST00790	964	EST01977
580	EST00590	675	EST00661	775	EST00737	872	EST00791	966	EST01979
581	EST00591	676	EST00662	777	EST00739	873	EST00792	967	EST01980
583	EST00593	677	EST00663	779	EST00741	874	EST00793	970	EST01983
584	EST00594	678	EST01517	780	EST01549	875	EST00794	972	EST01986
585	EST00595	679	EST01518	781	EST01550	876	EST00795	974	EST01988
586	EST00596	680	EST00664	783	EST01552	877	EST01877	975	EST01989
587	EST01488	682	EST00666	785	EST01553	878	EST01878	976	EST01990
588	EST00597	683	EST00667	786	EST00742	879	EST01879	977	EST01991
589	EST00598	684	EST00668	787	EST00743	880	EST01880	978	EST01992
590	EST00599	685	EST00669	788	EST00744	882	EST01882	981	EST01995
591	EST01489	686	EST00670	789	EST00745	883	EST01883	982	EST01996
592	EST00600	688	EST00672	790	EST01554	885	EST01885	983	EST01997
593	EST00601	690	EST00674	792	EST00747	887	EST01887	984	EST01998
595	EST01840	692	EST00676	793	EST00748	889	EST01889	987	EST02001
597	EST00603	693	EST00677	794	EST01555	890	EST01890	989	EST02003
598	EST00604	694	EST00678	796	EST00750	892	EST01892	990	EST02004
599	EST00605	696	EST01521	797	EST00751	893	EST01893	991	EST02005

Table 9: ESTs with Poor Coding Probability

SEQ ID#	EST#	103	EST00317	204	EST00235	309	EST00174	404	EST00453
		104	EST00354	206	EST00166	315	EST00008	405	EST00454
1	EST00007	105	EST00365	207	EST00167	316	EST00378	406	EST00455
2	EST00009	107	EST00093	209	EST00331	317	EST00379	407	EST00456
3	EST00010	109	EST00095	210	EST00168	318	EST00380	408	EST00457
4	EST00011	111	EST00281	211	EST00332	320	EST00382	409	EST01444
5	EST00012	112	EST00318	212	EST00169	321	EST00383	410	EST00458
6	EST00013	113	EST00097	213	EST00170	322	EST00384	411	EST00459
8	EST00234	116	EST00100	214	EST00171	323	EST00385	412	EST01445
10	EST00016	117	EST00319	216	EST00173	325	EST00386	416	EST00462
14	EST00019	118	EST00101	219	EST00176	326	EST00387	417	EST00463
16	EST00021	119	EST00102	220	EST00372	327	EST00388	419	EST00465
17	EST00022	120	EST00103	221	EST00359	328	EST00389	420	EST00466
18	EST00373	121	EST00104	224	EST00356	329	EST00390	421	EST00467
19	EST00023	122	EST00105	225	EST00178	330	EST00391	422	EST01447
21	EST00025	123	EST00106	226	EST00333	331	EST00392	423	EST00468
23	EST00026	125	EST00108	229	EST00180	332	EST00393	424	EST01448
25	EST00028	126	EST00109	231	EST00334	334	EST00395	425	EST00469
27	EST00029	127	EST00320	232	EST00182	335	EST00396	427	EST01449
28	EST00030	129	EST00321	233	EST00183	337	EST00398	428	EST01451
29	EST00031	130	EST00355	235	EST00185	340	EST00402	429	EST00471
30	EST00032	131	EST00322	236	EST00186	341	EST00403	431	EST00473
31	EST00033	133	EST00111	237	EST00187	342	EST00404	432	EST01452
32	EST00233	134	EST00375	238	EST00188	344	EST00405	434	EST00475
33	EST00034	135	EST00112	239	EST00189	345	EST00406	435	EST00476
34	EST00035	136	EST00113	240	EST00335	347	EST01829	436	EST00477
35	EST00036	138	EST00114	241	EST00191	348	EST01830	437	EST00478
36	EST00037	139	EST00116	242	EST00192	349	EST01831	438	EST00479
39	EST00039	140	EST00117	243	EST00193	350	EST00407	439	EST00480
40	EST00040	141	EST00118	244	EST00194	351	EST00408	440	EST01454
41	EST00041	142	EST00323	245	EST00347	352	EST00409	442	EST01456
42	EST00042	143	EST00119	246	EST00196	353	EST00410	443	EST00482
46	EST00044	146	EST00122	250	EST00197	354	EST01433	444	EST00483
47	EST00046	147	EST00292	252	EST00198	355	EST00411	446	EST00485
49	EST00047	148	EST00236	254	EST00200	356	EST00412	447	EST00486
50	EST00048	149	EST00123	255	EST00201	357	EST00413	448	EST00487
51	EST00049	150	EST00124	256	EST00345	358	EST00414	449	EST00488
52	EST00052	151	EST00125	257	EST00337	359	EST00415	450	EST00489
53	EST00054	152	EST00126	259	EST00202	360	EST00416	451	EST00490
54	EST00055	153	EST00127	260	EST00357	361	EST00417	452	EST00491
55	EST00056	154	EST00128	261	EST00338	363	EST00419	455	EST00494
56	EST00057	155	EST00129	262	EST00339	364	EST00420	457	EST00495
57	EST00058	157	EST00131	265	EST00205	365	EST01434	458	EST00496
58	EST00059	158	EST00132	266	EST00206	366	EST00421	459	EST00497
59	EST00061	159	EST00325	272	EST00340	367	EST00422	460	EST01457
60	EST00062	160	EST00326	274	EST00268	369	EST00424	461	EST01836
63	EST00065	162	EST00133	275	EST00209	372	EST00427	462	EST00498
64	EST00066	163	EST00134	278	EST00342	373	EST01832	464	EST00499
67	EST00351	165	EST00136	279	EST00213	374	EST00428	465	EST00500
68	EST00068	167	EST00138	280	EST00343	375	EST00429	466	EST00501
69	EST00360	168	EST00140	283	EST00215	376	EST01436	467	EST00502
71	EST00070	169	EST00141	284	EST00216	377	EST00430	468	EST00503
73	EST00072	170	EST00295	286	EST00217	378	EST00431	470	EST00504
74	EST00073	171	EST00327	287	EST00218	379	EST00432	SEQ ID#	EST#
76	EST00075	172	EST00142	288	EST00219	380	EST01439	473	EST00506
80	EST00077	173	EST00143	289	EST00220	381	EST00433	474	EST00507
81	EST00315	175	EST00144	290	EST00221	382	EST00434	477	EST01463
83	EST00079	178	EST00294	291	EST00222	SEQ ID#	EST#	478	EST00510
84	EST00080	182	EST00329	292	EST00223	383	EST00435	479	EST00511
85	EST00081	184	EST00149	293	EST00224	384	EST01440	480	EST01464
86	EST00082	185	EST00150	294	EST00225	386	EST00437	481	EST00512
87	EST00083	186	EST00151	SEQ ID#	EST#	388	EST00439	482	EST01465
89	EST00085	190	EST00153	295	EST00226	390	EST01442	483	EST00513
91	EST00086	191	EST00154	297	EST00230	391	EST00441	484	EST00514
92	EST00087	194	EST00157	298	EST00231	393	EST00443	487	EST00516
94	EST00353	SEQ ID#	EST#	302	EST00303	395	EST00445	488	EST00517
95	EST00088			303	EST00348	397	EST00446	489	EST00518
96	EST00089	195	EST00158	304	EST00307	398	EST00447	490	EST00519
99	EST00316	196	EST00159	305	EST00308	399	EST00448	491	EST00520
SEQ ID#	EST#	197	EST00160	306	EST00309	400	EST00449	492	EST00521
100	EST00090	198	EST00161	307	EST00312	401	EST00450	495	EST00524
101	EST00091	203	EST00164	308	EST00314	403	EST00452	497	EST00526

Table 8: ESTs with Marginal Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>		
11	EST00018	1222	EST02251
12	EST00274	1224	EST02253
24	EST00027	1228	EST02257
45	EST00364	1267	EST02296
79	EST00076	1301	EST02331
90	EST00302	1397	EST02431
110	EST00096	1448	EST02484
144	EST00120	1480	EST02517
145	EST00121	1493	EST02531
192	EST00155	1499	EST02537
222	EST00177	1503	EST02541
234	EST00184	1527	EST02568
277	EST00212	1536	EST02577
319	EST00381	1548	EST02590
368	EST00423	1562	EST02605
370	EST00425	1572	EST02615
387	EST00438	1575	EST02618
402	EST00451	1595	EST02640
415	EST00461	1608	EST02653
418	EST00464	1610	EST02655
426	EST00470	1621	EST02667
503	EST00528	1627	EST02674
517	EST00539	1629	EST02677
522	EST00543	1631	EST02678
532	EST00551	1683	EST00840
540	EST00557	1692	EST00847
570	EST00580	1751	EST00895
573	EST00583	1756	EST00900
576	EST00586	1764	EST02690
613	EST00615	1770	EST00910
617	EST00617	1793	EST00929
626	EST00622	1847	EST00973
681	EST00665	1877	EST00998
726	EST00700	1897	EST01012
727	EST00701	1900	EST01015
738	EST00711	1939	EST01655
745	EST00715	1940	EST01046
752	EST00720	1954	EST01058
791	EST00746	<u>SEQ ID#</u>	<u>EST#</u>
795	EST00749	1990	EST01087
803	EST00756	2008	EST01103
845	EST00777	2031	EST01123
852	EST00782	2041	EST01130
854	EST00784	2044	EST01132
907	EST01907	2060	EST01146
912	EST01912	2100	EST01176
935	EST01938	2136	EST01210
<u>SEQ ID#</u>	<u>EST#</u>	2153	EST01225
968	EST01981	2204	EST01265
985	EST01999	2212	EST01270
988	EST02002	2248	EST01297
1043	EST02059	2250	EST01299
1081	EST02100	2266	EST01310
1089	EST02108	2309	EST01340
1116	EST02136	2347	EST01370
1134	EST02154	2388	EST01406
1205	EST02233	2398	EST01422
		2405	EST01427

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Table 7: ESTs with Good Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>				
20	EST00024	1041	EST02057	2362	EST01383
72	EST00071	1083	EST02102	2378	EST01397
82	EST00078	1099	EST02118	2399	EST01423
88	EST00084	1105	EST02124	2407	EST02714
137	EST00272	1113	EST02133		
177	EST00328	1139	EST02161		
193	EST00156	1146	EST02168		
200	EST00162	1196	EST02221		
218	EST00175	1210	EST02238		
228	EST00179	1233	EST02262		
247	EST00279	1285	EST02314		
264	EST00204	1331	EST02361		
267	EST00297	1388	EST02421		
296	EST00228	1418	EST02453		
371	EST00426	1439	EST02475		
385	EST00436	1502	EST02540		
392	EST00442	1537	EST02578		
414	EST00460	1563	EST02606		
433	EST00474	1599	EST02644		
453	EST00492	1602	EST02647		
471	EST00505	1693	EST00848		
496	EST00525	1695	EST00850		
524	EST00544	1729	EST00877		
526	EST00546	1730	EST00878		
529	EST00549	1738	EST00883		
549	EST00563	1739	EST00885		
557	EST00569	1743	EST00888		
578	EST00588	1768	EST00908		
596	EST00602	1780	EST00916		
607	EST00610	1804	EST00938		
619	EST00619	1805	EST00939		
657	EST00646	1811	EST00945		
660	EST00649	1819	EST00950		
689	EST00673	1826	EST00956		
695	EST00679	1830	EST00959		
699	EST00682	1845	EST00971		
729	EST00703	1848	EST00974		
742	EST00713	1853	EST00977		
747	EST00717	1967	EST01066		
755	EST00723	1992	EST01089		
759	EST00725	1994	EST01091		
776	EST00738	<u>SEQ ID#</u>	<u>EST#</u>		
778	EST00740	1997	EST01094		
782	EST01551	2046	EST01134		
829	EST00768	2101	EST01177		
835	EST00772	2102	EST01178		
836	EST00773	2105	EST01181		
862	EST01872	2106	EST01182		
881	EST01881	2141	EST01213		
<u>SEQ ID#</u>	<u>EST#</u>	2184	EST01251		
884	EST01884	2196	EST01260		
924	EST01926	2203	EST01264		
929	EST01932	2232	EST01283		
938	EST01941	2308	EST01339		
971	EST01985	2345	EST01368		
995	EST02009	2346	EST01369		
996	EST02010	2351	EST01373		
1031	EST02046	2354	EST01375		
		2355	EST01376		
		2359	EST01380		

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Table 6: ESTs with Excellent Probability of Containing Coding Sequence

SEQ ID#	EST#						
7	EST00014	973	EST01987	1807	EST00941	2373	EST01393
15	EST00020	979	EST01993	1809	EST00943	2374	EST01394
48	EST00291	980	EST01994	1820	EST00951	2393	EST01417
62	EST00064	986	EST02000	1829	EST00958	2394	EST01418
66	EST00067	1000	EST02014	1849	EST00975	2396	EST01420
75	EST00074	1004	EST02018	1860	EST00983		
98	EST00260	1007	EST02021	1866	EST00989		
106	EST00092	1018	EST02032	1871	EST00994		
108	EST00094	1021	EST02035	1888	EST01005		
114	EST00098	1034	EST02050	1890	EST01007		
115	EST00099	1047	EST02063	1892	EST01009		
124	EST00107	1090	EST02109	1903	EST01018		
128	EST00252	1096	EST02115	1904	EST01019		
156	EST00130	1115	EST02135	1914	EST01026		
164	EST00135	1118	EST02138	1930	EST01040		
166	EST00137	1129	EST02149	1944	EST01050		
174	EST00296	1133	EST02153	1949	EST01054		
179	EST00145	1141	EST02163	1962	EST01062		
183	EST00148	1163	EST02187	1973	EST01071		
201	EST00163	1183	EST02208	1977	EST01075		
205	EST00165	1243	EST02272	1982	EST01080		
215	EST00172	1264	EST02293	1991	EST01088		
230	EST00181	1265	EST02294	1993	EST01090		
253	EST00199	1266	EST02295	2000	EST01097		
263	EST00203	1287	EST02317	2001	EST01098		
268	EST00369	1308	EST02338	2012	EST01106		
270	EST00207	1324	EST02354	2013	EST01107		
271	EST00283	1344	EST02374	2024	EST01117		
273	EST00208	1356	EST02386	2043	EST01131		
276	EST00211	1365	EST02396	2051	EST01138		
281	EST00214	1383	EST02415	2056	EST01142		
285	EST00286	1399	EST02433	2058	EST01144		
333	EST00394	1401	EST02435	2059	EST01145		
336	EST00397	1405	EST02439	2064	EST01149		
339	EST00400	1417	EST02452	2090	EST01167		
362	EST00418	1451	EST02487	2094	EST01171		
389	EST00440	1457	EST02493	2116	EST01192		
441	EST00481	1463	EST02500	2117	EST01193		
454	EST00493	1473	EST02510	2128	EST01202		
476	EST00509	1479	EST02516	2131	EST01205		
493	EST00522	1516	EST02555	2134	EST01208		
504	EST00529	1528	EST02569	2144	EST01216		
516	EST00538	1531	EST02572	2145	EST01217		
518	EST00540	1544	EST02586	2150	EST01222		
551	EST01482	1551	EST02593	2155	EST01227		
552	EST00565	1558	EST02601	2161	EST01231		
559	EST00570	1561	EST02604	2163	EST01238		
582	EST00592	1581	EST02625	2174	EST01242		
602	EST00606	1586	EST02631	2176	EST01244		
606	EST00609	1591	EST02636	2189	EST01255		
608	EST00611	1616	EST02661	2214	EST01272		
621	EST00620	1624	EST02670	2225	EST01278		
635	EST00629	1630	EST02676	2227	EST01279		
642	EST00634	1637	EST00796	2233	EST01284		
644	EST00636	1639	EST00799	2235	EST01286		
687	EST00671	1649	EST00808	2236	EST01287		
700	EST00683	1651	EST00810	2255	EST01302		
743	EST00714	1677	EST00835	2259	EST01304		
753	EST00721	1682	EST00839	2263	EST01307		
760	EST00726	1694	EST00849	SEQ ID#	EST#		
764	EST00729	1706	EST00857	2267	EST01756		
808	EST00761	1708	EST00858	2281	EST01321		
823	EST01864	1710	EST00860	2283	EST01322		
834	EST00771	1716	EST00865	2300	EST01333		
886	EST01886	SEQ ID#	EST#	2303	EST01335		
919	EST01921	1718	EST00867	2303	EST01335		
930	EST01933	1731	EST00879	2314	EST01345		
936	EST01939	1742	EST00887	2334	EST01358		
948	EST01957	1746	EST00891	2339	EST01362		
965	EST01978	1760	EST00903	2342	EST01365		
		1767	EST00907	2348	EST01371		
		1769	EST00909	2358	EST01379		
		1777	EST00913	2367	EST01388		

EXAMPLE 9

Probability of ESTs Containing Coding Sequences

5 The ESTs of the present invention were statistically
evaluated using the coding-region prediction program CRM
via the GRAIL server (Uberbacher, E. & Mural, R. *Proc.*
10 *Natl. Acad. Sci. USA*, 88: 11261-5 (1991)). The CRM program
uses a neural network to combine results from several
different coding regions by looking at different 6 bp
sequences found in coding exons and in introns. The
15 program additionally conducts reading frame searches and
assesses randomness at the third position of codons. This
protocol categorizes sequences as having an excellent,
good, marginal, or poor probability of containing coding
regions. The results are reported in Tables 6-9. There
20 were 219 ESTs categorized as "excellent" (Table 6); 120
categorized as "good" (Table 7); 113 categorized as
"marginal" (Table 8); and 1743 categorized as "poor" (Table
9). These results indicate that most ESTs of the present
invention comprise noncoding regions.

TABLE 5. Accuracy Of Single-Run Double-Stranded Automated Sequencing

<u>Bases from Primer</u>	<u>Mismatches/ Ambiguities</u> ⁺	<u>Gaps Insertions</u> ⁺	<u>Percent Deletions</u> ⁺	<u>Aligned Accurate</u>	<u>Bases</u>
101 - 200	1.45	0.18	0.19	98.2	8,800
201 - 300	1.72	0.25	0.11	97.9	8,130
301 - 400	2.07	0.98	0.37	96.6	5,404
>400	3.53	2.63	1.06	92.8	3,197

ESTs statistically identical to known human sequences and those matching mitochondrial and ribosomal genes were aligned with sequenced from GenBank using the GCG program BESTFIT. The first 85 nucleotides was polylinker sequence which was not aligned with the pBluescript SK reference sequence. Tabulation of errors began 15 bases into the BESTFIT alignment and thus is reported beginning with bases 101-200. ⁺Error rates are reported as number of mismatches, insertions, or deletions per hundred aligned bases. "Mismatches" includes ambiguous base calls.

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The number of mismatches, insertions and deletions was counted for each hundred bases of the sequence (Table 5). As expected, the sequence quality was best closest to the primer and decreased rapidly after about 400 bases. The number of deletions and insertions relative to the GenBank reference sequence increased five- to ten-fold beyond 400 bases, while the number of mismatches doubled. The average accuracy rate for individual double-stranded sequencing runs was 97.7% to 400 bases.

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The resulting metaphase chromosomes had fluorescent tags localized to those regions of the chromosome that were homologous to the EST. Thus, a particular EST was localized to a particular region on a given chromosome. In this manner, SEQ ID NOs 396, 485, 506, 1880 and 1894 were mapped using fluorescent in situ hybridization to locations on chromosomes 17, 7, 10 and 1 respectively (See Table 4B below). For a review of the technique see Verma et al., *Human Chromosomes: A Manual of Basic Techniques*. Pergamon Press, NY (1988), which is hereby incorporated by reference.

Table 4: Precise Chromosomal Localization of ESTs

	SEQ ID	EST#	Map Location
	-----	-----	-----
15	A.	19	EST00023 6p
		22	EST00301 6p
		1894	EST01643 6p21
		1	EST00007 6q
		224	EST00356 6q
		288	EST00219 6q
20		162	EST00133 Xp11.21 - Xp21.2
		1917	EST01029 Xp11.21 - Xp21.2
		1669	EST00827 Xq26 - Xq27.1
		1899	EST01014 Xq28
25	B.	1880	EST01634 1q32
		485	EST01466 7p13
		506	EST01471 10q11.2
		396	EST01443 17q25

EXAMPLE 8

Automated DNA Sequencing Accuracy

ESTs that match human sequences in GenBank are excellent tools for the analysis of the accuracy of double-strand automated DNA sequencing. Ninety EST/GenBank matches were examined for the number of nucleotide mismatches and gaps required to achieve optimal alignment by the Genetics Computer Group (GCG) program BESTFIT (Devereux et al, *Nucleic Acids Research* 12: 387 (1984)).

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J. 5: 12-20 (1991)). Mapped ESTs are also a new resource to identify candidates for the estimated 5000 single-locus disease-associated genes (Id.).

EXAMPLE 7

5 Alternative Technique for Mapping to Chromosomes
 Mapping of ESTs to chromosomes using fluorescence in situ
 hybridization

10 This technique was used to map an EST to a particular location on a given chromosome. Cell cultures, tissue, or whole blood were used to obtain chromosomes.

 0.5 ml. of whole blood was added to RPMI 1640 and incubated 96 hours in a 5%CO₂/37°C incubator. 0.05 ug/ml colcemide was added to the culture one hour before harvest. Cells were collected and washed in PBS. The suspension was
15 incubated with a hypotonic solution of KCl added dropwise to reach a final volume of 5 ml. The cells were spun down and fixed by resuspending the cells in methanol and glacial acetic acid (3:1). The cell suspension was dropped onto glass slides and dried.

20 The slides were treated with RNase A and washed then dehydrated in a series of increasing concentrations of ethanol.

 The EST to be localized was nick-translated using fluorescently labeled nucleotide (Korenberg, Jr., et al.,
25 Cell 53(3):391-400 (1988)). Following nick translation, unincorporated label was removed by spin dialysis through Sepharose. The probe was further extracted with phenol-chloroform to remove additional protein. The chromosomes were denatured in formamide using techniques known in the art
30 and the denatured probe was added to the slides. Following hybridization, the cells were washed. The slides were studied under a fluorescent microscope. In addition, the chromosomes can be stained for G-banding or Q-banding using techniques known in the art.

The foregoing techniques have been used to further localize 9 ESTs and their associated genes to precise locations onto chromosome 6 or chromosome X, as reflected in Table 4A (in Example 7 below), using sublocalization techniques that employ somatic cell hybrids. ESTs were used as hybridization probes and mapped to other chromosomes using techniques disclosed in Example 7. Somatic cell hybrids were prepared that contained defined subsets of chromosomes 6 and X. Methods for preparing and selecting somatic cell hybrids are known in the art. For a review of an exemplary procedure to generate somatic cell hybrids containing the short arm of human chromosome 6, see Zoghbi, et al., *Genomics* 9(4):713-720 (1991). For a general review of somatic cell hybridization see Ledbetter et al. (*supra*). The hybrids were processed to obtain DNA and analyzed by PCR and by fluorescence in situ hybridization. SEQ ID NOs 19, 22, 1, 224, 288 mapped to chromosome 6, while SEQ ID NOs 162, 1917, 1699 and 1899 mapped to chromosome X using somatic cell hybrids.

EXAMPLE 6

Mapping of All ESTs to Human Chromosomes

The procedure of Example 5 is repeated for all of the ESTs from Examples 1 and 2 not previously mapped to human chromosomes. Data are generated corresponding to the data in Table 3 for all of the unmapped ESTs. As previously mentioned, virtually all of the ESTs will map to a unique chromosomal location. The inability of any ESTs to localize to a unique location will be readily ascertainable during the mapping process.

Physical mapping of the type reported in Table 4 on all the EST clones reported here would provide human chromosome markers spaced on average every 1.2 megabases and would roughly double the number of expressed sequences that have been localized to chromosomes (McKusick, V. FASEB

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<u>SEQ ID</u>	<u>EST#</u>	<u>Chr</u>	<u>PRIMER #1</u>	<u>PRIMER #2</u>
162	EST00133	X	ATGTGAGCATCTATACCTGC	AATGAAGGCATGAGAATAGG
1669	EST00827	X	CGGACAACCTAGGATAAATGC	TACGCGTTTGAATGGCTTGA
1917	EST01029	X	GAATAGCATTATTAGCCAGT	GGACCTATTGGAGATCTACT
1708	EST00858	X	AL2-AAGGCGAGGATTATGTGC	TTCTACTGGGTACACTTCGACC

Abbreviation: AL2: Amino-Link-2 Fluorescent Tag, Chr.: Chromosome.

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SEO ID	EST#	Chr	PRIMER #1	PRIMER #2
1	EST00007	6	TAGTTGATGGTCTGGGTTAT	GAAATCCCAGGGAGACAATG
19	EST00023	6	CAACTTACATTAGGGGTTTG	GACCTCATTAGAAGAGCCCA
155	EST00129	6	GGAAGCTGCCATATAAGCTC	TCAGTGTCTGACAATCTACC
224	EST00356	6	GCTGTATGTTAACCCTTTGT	TGGAACCCCTCAAACACTGCT
288	EST00219	6	ACTTTTCATGTTGAGAAGTAT	ATCTAGCTGAAACATTGCTG
1638	EST00798	6	CTTCATCTGTTAACTGTTGA	TGAAAATGAGTCACAGGCAG
1675	EST00833	6	AL2 - ACCCAGTTCTCAAAGACC	GGTTTTACCATTACAGAGGC
22	EST00301	6	CTCCGTGATTACCTTCATCT	TTGTAGGTATCTCTGTCTAGCT
207	EST00167	7	GGTGCTACTTTGTGAATGCT	AGCAATGTGATTTTGTAGG
137	EST00272	7	AGTGGTCACTATCTACATGG	GATTCAGAATTACTAAGCCG
1659	EST00817	7	TGTATAGGCTCTACATAAAG	CTTAATCATGGATTCTTCCTG
1680	EST00838	7	AL2 - GTTCTTTCCAGGTATGC	TTGTTGGTACTGAGGAAAGTGCG
292	EST00223	8	TGCAGCAGTGACCATGAGAA	ATCATCTTTCCACGCGGCTT
134	EST00375	9	TCTGGGCTTCTGTGGTTCAA	CTGGCTGCTCAGCAACTCAT
1906	EST01021	9	GGATGTTTTCTATGTGACGA	TTCCAGTGCCCTTTTGTCC
1645	EST00804	10	CTCCTTTGGGACAAACAAC	CCAACCCAAACATATTCTA
20	EST00024	10	AGCTGTTCCCTGAGAGATGCA	CCTTGTAAGAAAGACTTTC
157	EST00131	10	TCAGCAACAGGTCACTTTGG	CTAAGCATCTGCATGTCCAG
172	EST00142	10	TACTAGCATTCTTACTCTC	TATGCTGATTGTTTGCACCTC
250	EST00197	10	GGTGATTAGAGAGTCTGTTG	GAACCTGTAGTGTCTTAA
133	EST00111	11	GGAAATTAGGCTTAGCTCAC	GTGCAGAATACTTAGAGTCC
178	EST00294	11	GTTTGAAGGAAGTGATTTC	TAGGGCCACCTCCAGTTCAT
10	EST00016	11	GTCTTTGGATTCTACGTAGA	CGATAATGACATTTCTCTGG
126	EST00109	11	AL2 - CTAACCACAACCCACACATTG	CCTCAGCACAAGAGAAGATGG
7	EST00014	12	AACCTTGCAACATAAATAC	GAGCAATGATTTCTAACAGT
254	EST00200	13	TTGTGTACTGTCTGATAGAC	TAAGCCATGGGCATCTATAA
2409	EST00273	13	GCAAGATGATGGAACATCCC	TTCTTTCTGGAGGCTCTACA
170	EST00295	14	GGTGCTTAAGGCCACTTTTG	CTTAGAGGATCATAGGTCTG
255	EST00201	14	CCAGGAGAGTAAGAAGATCA	GCAGAGTTGAATATGAACCT
290	EST00221	14	GTGCCAAGATGGCTCATGTA	GTATAGCTTTAAGCCAGTTC
293	EST00224	14	AATGCATTATGCCTGGTCTT	GGAAAAGTCTAGAACTTAGT
1664	EST00822	14	GGGTGAGAATTAAGAGGTCT	GTTTCATCTCTAACTCTTTTC
315	EST00008	14	AAGCTGGCTGGGAAATGTTT	GTCATGCTAGTAACTTACAC
1689	EST00845	14	AL2 - AGGAGGAAGCTGAAATCC	GGAAAGTCCATAAGAGACTCACC
95	EST00088	15	GTGACAGACCATGTCTATTG	AAGTGAGCGATTGCACCTTC
205	EST00165	15	AGGATGACCTGAGTGAGCTG	CCATGGCAGCAAGGAACCTC
33	EST00034	16	TGTGTGAAAGGGAGTCTTGT	CCATTTTGACTGTTCCATAG
247	EST00279	16	TGGCTAGGGCAGGCCTTAAA	GAGAAGAATATCAAATGGGG
18	EST00373	16	CCATCTGTGTCCCAATTAAGC	AGGGAAGAAGTCTAGAGCGA
68	EST00068	17	CAAAGACGGGAGACGAATGA	AGTGGAACCGGTGGCCTATG
1652	EST00811	17	GAGCTGCATGTTGATAAGTA	TTGACTTAAGCTGACCTTAA
1702	EST00854	17	AL2 - TTGCTGTGGAATCCATGAGAG	GGCAAGTGATCTGTTCTTGG
84	EST00080	19	AGAGATGTCAGTCCATTATC	CTATTCCACCTTACTCAAGG
223	EST00368	19	CATCATGTCCGAGACGCATT	TGGATGACCTGAGTCTGCAG
21	EST00025	20	AGTTCTGGAGGCTAGGAGTT	ATGTAAGGACCCCTAGATGG
210	EST00168	20	TGTCAACTTCCCTTTGGCCT	GAAGCTTGCTCATTACAGGAA
136	EST00113	20	AL2 - TCGGAGAAGTTGCAGTTCTG	GTTAAAGCTGTTAGACGGGGC
120	EST00103	22	CACTGACTGACTCCTCTTTA	GGAAACCGTAACCTCTCCATAG
313	EST00276	X	ATTGACCTTCAATGTAATAA	TTGGATTGGGGCAAAATAG

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Table 3: Assignment of ESTs to Chromosomes by PCR

SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
5	EST00012	1	TCCAGGCAATCCCAGAATAG	CTAATTGAGCTCACTGGCCC
57	EST00058	1	CTGTTTGCAAGTTTCAAAGC	GCCATTTCTAACAACCAGAG
64	EST00066	1	GCCATTGTGCTGAATAGAGT	GTTAGTGTTCCTTAGCAAG
83	EST00079	1	CAGCTAATTGACCTGGGCTA	CAACATGCTCTGAGCTTTAG
83	EST00079	1	GGCAGAGCATAATGAGTATA	CATATGCATATGGTCCCTAT
91	EST00086	1	AGTTTAGATGGAGGGCTGTC	TCTGCCCTAATGCGCAGGCT
105	EST00365	1	CTTAATCACCTCCCCTTTTGT	CCTTAGTTGGAGATAAGGTC
109	EST00095	1	AGTCTAATCCTGTACACTTG	CGGGCTTTCTCTGAATTGGT
116	EST00100	1	TTAGAAGTGCCCATGGGAGG	TTTTAAGGCTCTGGAGTGTT
141	EST00118	1	CTCAGAGAACTTAAAGTGAA	CTACAGAATCATTTACCAG
220	EST00372	1	AAGTTGCACATTGCCCAAGG	ATAGTACTGCAAGGTTATTC
237	EST00187	1	TTACAAATTTCTCTTGACGC	CTGAAGGAGCACAGTTTCTC
242	EST00192	1	GGATCAGATAATCAAACAGG	GCTTAGGATATGAATGCATA
259	EST00202	1	GCATCACAGTTTAACTGAGG	CTACATATTTGTGCCTCCTT
269	EST00293	1	CTGTTGCTGTGCGTAGCTT	CTTTTGACCCAGTGAACTT
299	EST00249	1	GATCATGCAGACGTAGATAT	CCAACCTCTGCCAGATCATT
1651	EST00810	1	TAGTCGCTGTAAGTTGATTC	GCTTTGCTGGATGCTTCATT
16	EST00021	2	CAGGCAAGTTTCTTCCAGGA	TCAGACCCATGGTCAGCTT
1898	EST01013	2	GGCTGAGAACGGTTAGCATA	CCCTCAGCTTAGGGGAATG
8	EST00234	2	TAGAAGGCAAACATGTCCC	GGTTGAGGATTGGCTTTTAC
36	EST00037	2	AGCCAGAAGGCTGTAAAG	GCAGTGAACCAGTACTCCTA
123	EST00106	2	GTCTAATTTGTAACCTTCAG	GATAGATTGTATAAGAAGCC
192	EST00155	2	GATTTATGTCTGGGAATAA	GCAGCATGTGAAAGAATGAT
200	EST00162	2	TTTAATGGGTGGTGGGAGCT	CGATGCACATCCTTCTCCAT
284	EST00216	2	CCTAAGAATTCTGTTGGCTC	GTCTGGGCACATAATAGATTTG
102	EST00248	3	ATACTACATCTAGTCTGG	TTACAGTTCTGTGGTTTTT
167	EST00138	3	AAACAGCTGCGGAGTACA	AAAGGATCCTCCACTCCAGA
12	EST00274	3	CCTAGCAAACATCATACAC	CATAAGTGAATGGACACAGG
60	EST00062	3	ACACATTAACGGTGTGTCAG	GGAATCAGCCCTTGAGGACT
77	EST00257	3	AAGCTCACAAACGAGATCTG	CTGGAACAGCTTACAAAGGT
107	EST00093	3	ATTGAACCTCTGTCAACAGTG	TGTAAAACAAAGGCCAAACT
108	EST00094	3	AL2 - GCAGGATGTCACTTTTGAG	AGCACACATTATCTACCACGGC
1706	EST00857	3	AL2 - GCAGGATGTCACTTTTGAG	CCAGCACACATTATCTACCACG
37	EST00038	4	AACTTCGCAGTCATGAGAAC	TGTATCGGGCAGTTCTCAG
6	EST00013	4	CACATGTTCTCCCTCTTTCA	GCATTTTGGAGCTCTTCCGT
37	EST00038	4	AL2 - GGAAGTACAGGATTGGC	TTAGAGATGGGATGATGCCG
31	EST00033	5	TGGGTACCTAAGGTGTTTG	GACTAATCTAAGGTCTAGG
28	EST00030	5	AGATAAGTTAGGAAGCTGGT	ACTCACTGTAGTATCATCC
59	EST00061	5	AAAGTTTCTTAGCACCCCCC	CAGACTTTGACAAAAGAATC
74	EST00073	5	ATCAGACACGTGGCAGGGTT	AAGTCCCTGAGGGTGCAGAA
121	EST00104	5	TGAAGGCAGCTGCTAAATCT	GGATGTATTGATCTGACTCA
149	EST00123	5	ATACTGTCAACGGAGGGTGA	GTCTGCAGGTTTCTCCTTGA
235	EST00185	5	TTACTGTCCCATCAGATATC	TACACTCTTAAGAAGGTATG
1643	EST00803	5	GAGCGTTTAAAAGAGATTCT	TACAGACAGCCATGTTCCAA
1677	EST00835	5	AL2 - TCTCCAACACAGTCATGC	CGGATGCCATCATATACC
23	EST00026	5	CCTGCAGTGACACTTAACAT	CTGCTCACCTGAAATTGATAC
121	EST00104	5	AL2 - CAGATCAATACATCCTCTGGG	CTGTGCAGTGGTGAGTAAAGG

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The assignment of 100 ESTs and corresponding genes to chromosomes by PCR is shown in Table 3.

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these regions are less likely to prime other members of a gene family or pseudogenes.

The primers were used in polymerase chain reactions (PCR) to amplify templates from total human genomic DNA. PCR conditions were as follows: 60 ng of genomic DNA was used as a template for PCR with 80 ng of each oligonucleotide primer, 0.6 unit of Tag polymerase, and 1 uCi of a ³²P-labeled deoxycytidine triphosphate. The PCR was performed in a microplate thermocycler (Techne) under the following conditions: 30 cycles of 94°C, 1.4 min; 55°C, 2 min; and 72°C, 2 min; with a final extension at 72°C for 10 min. The amplified products were analyzed on a 6% polyacrylamide sequencing gel and visualized by autoradiography. If the size of the resulting product was equivalent to the EST from which the primers are derived, then the PCR reaction was repeated with DNA templates from two panels of human-rodent somatic cell hybrids; BIOS PCRable DNA (BIOS Corporation) and NIGMS Human-Rodent Somatic Cell Hybrid Mapping Panel Number 1 (NIGMS, Camden, NJ).

PCR was used to screen a series of somatic cell hybrid cell lines containing defined sets of human chromosomes for the presence of a given EST. DNA was isolated from the somatic hybrids and used as starting templates for PCR reactions using the primer pairs from EST sequences selected above. Only those somatic cell hybrids with chromosomes containing the human gene corresponding to the EST will yield an amplified fragment. ESTs were assigned to a chromosome by analysis of the segregation pattern of PCR products from hybrid DNA templates. For a review of techniques and analysis of results from somatic cell gene mapping experiments. (See Ledbetter et al., *Genomics* 6:475-481 (1990).) The single human chromosome present in all cell hybrids that give rise to an amplified fragment represents the chromosome containing that EST.

sequences to minimize the chance of amplifying through an intron. The oligonucleotides were 18-23 bp in length and designed for PCR amplification using the computer program INTRON (National Institutes of Mental Health, Bethesda, MD). The program is based on the assumptions that: 1) introns are genomic sequences that interrupt the coding and noncoding sequences of genes (Smith, J. Mol. Evol. 27:45-55 (1988)); 2) there are consensus sequences for splice junctions (Shapiro, et al., Nucl. Acids Res. 15:7155-7174 (1987)); and 3) that 90% of the human genes studied have 3' untranslated regions of mRNA not interrupted by introns in the genomic DNA (Hawkins, Nucl. Acids Res. 16:9893-9908 (1988)).

The program evaluates the likelihood that a given GG or CC dinucleotide represents a former exon-intron boundary. Specifically, every input strand is processed by the INTRON program twice, first evaluating the sense mRNA strand, and then processing the complementary or anti-sense strand. The program evaluates each sequence by finding all GG or CC pairs (possible former splice sites), searching for STOP codons in all three reading frames, and analyzing the GG or CC pairs surrounded by stop codons. All regions of the EST that are unlikely to contain splice junctions based on CC content, GG content, and stop codon frequency are then marked by the program in uppercase.

The creation of PCR primers from known sequences is well known to those with skill in the art. For a review of PCR technology see Erlich, H.A., PCR Technology; Principles and Applications for DNA Amplification. 1992. W.H. Freeman and Co., New York. ESTs were examined for the presence of stop codons in each reading frame and for consensus splice junctions. The presence of stop codons and absence of splice junction sequences are more characteristic of 3' untranslated sequences than of introns. The untranslated sequences are unique to a given gene; thus, primers from

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There is little redundancy in EST sequencing according to the present invention. Of the nuclear-encoded messenger RNAs, the most common ESTs were to the β -actin (0.6% of the EST clones) and myelin basic protein genes (MBP, 0.5% of the clones). MBP, a highly expressed structural component of nerve tissue (Kamholtz, J., de Ferra, F., Puckett, C., & Lazzarini, R. *Proc. Natl. Acad. Sci., USA* 83: 4962-4966 (1986)), displays four alternate splicing forms, of which at least two are present among the ESTs reported here. Other common ESTs were Gs-alpha gamma-actin and both α - and alpha-tubulin.

By matching ESTs to known database sequences, a phenotypic characterization of the tissue begins to emerge. Protein superfamilies matched by ESTs were grouped into three broad functional categories to assess the biological spectrum represented by these randomly selected cDNA clones. Structural and metabolic classes comprised about 30% of the ESTs with database matches. Twenty-five percent were involved in regulatory pathways and the remainder were not classifiable. Eleven of the eighteen enzymes of glycolysis and the citric acid cycle are represented by at least one subunit or isozyme. In addition, several genes not previously known to be expressed in the brain were matched, including spermine/spermidine acetyltransferase (Casero, R., Celano, P., Ervin, S., Applegren, N., Wiest, L. & Pegg, A. *J. Biol. Chem.* 266: 810-814 (1991)) and osteopontin (Young, M., Kerr, J., Termine, J., Wewer, U., Wang, M., McBride, W. & Fisher, L. *Genomics* 7:491-502 (1990)).

EXAMPLE 5

Mapping of ESTs to Human Chromosomes

Randomly selected ESTs corresponding to SEQ ID NOs. were assigned to chromosomes via PCR (see Table 3). Oligonucleotide primer pairs were designed from EST

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1856	EST01627	Ribosomal protein L1a	A24579	PIR	75	63.1
1974	EST01667	Ribosomal protein L3	JQ0771	PIR	74	80.0
301	EST00300	Ribosomal protein L30	R6RT30	PIR	57	96.5
22	EST00301	Ribosomal protein S10	R3RT10	PIR	66	97.0
2402	EST01826	Ribosomal protein S10	R3YM10	PIR	36	51.4
463	EST01459	Ribosomal protein YL10	S11581	PIR	40	68.3
1408	EST02442	Seven in absentia	A36195	PIR	46	80.8
299	EST00249	smg p25A GDP dissociation inhibitor	A35652	PIR	97	77.5
951	EST01960	Spectrin, beta	HUMSPTB	GB	268	67.7
2089	EST01699	Sperm membrane protein	A35981	PIR	52	58.5
2073	EST01697	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	44	100.0
2138	EST01715	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	49	92.0
430	EST00472	Synaptotagmin (p65)	SY65\$HUMAN	SP	27	53.6
1371	EST02402	Talin	MUSTALINR_1	GPU	79	81.2
1771	EST01601	Thiosulfate sulfurtransferase (rhodanese)	ROBO	PIR	65	81.8
300	EST00232	Transforming protein (dbl)	TVHUDB	PIR	25	65.4
189	EST00282	trkB	A35104	PIR	33	67.6
653	EST01512	Tubulin, alpha	HUMTUBAG	GB	223	75.0
594	EST01490	Tubulin, beta	HUMTB85	GB	298	93.6
757	EST01542	Tubulin, beta	HUMTUBBM	GB	217	90.4
1245	EST02274	Tubulin, beta	A26561	PIR	105	88.7
1147	EST02169	Tyrosine kinase	HUMECK	GB	384	74.3
1701	EST00853	Unc-104	JN0114	NR	36	45.0
2121	EST01711	Valine-tRNA ligase	A29871	PIR	56	57.9
187	EST00152	Wilm's tumor-related protein	HUMQM	GB	228	99.6
1726	EST01588	XPR2 alkaline extracellular protease	B26955	PIR	88	46.1
249	EST00275	Zinc Finger Proteins	S06551	PIR	25	57.7
413	EST01446	Zinc Finger Proteins	S00754	PIR	45	60.9
469	EST01460	Zinc Finger Proteins	C32891	PIR	34	54.3
833	EST01560	Zinc Finger Proteins	S00754	PIR	105	67.0
1230	EST02259	Zinc finger proteins	S00754	PIR	71	62.5
1496	EST02534	Zinc finger proteins	A34612	PIR	50	45.1
2324	EST01352	Zinc Finger Proteins	S10397	PIR	29	56.7

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724	EST01529	Interferon-induced 54K protein	INI4\$HUMAN	SP	76	70.1
1035	EST02051	J1 protein	MUSJ1PRO	GB	362	85.7
1229	EST02258	KUP protein	HUMKUPMR_1	GPU	54	36.4
993	EST02007	Kinase 5 protein	CHKCEK5_1	GPU	68	94.2
77	EST00257	Kinesin	A35075	PIR	57	86.2
78	EST00258	Kinesin	A35075	PIR	62	47.6
2245	EST01748	Kinesin	A35075	PIR	98	52.5
2282	EST01764	Lamin B receptor	A36427	PIR	76	71.4
2173	EST01724	Lon protease	JO0901	PIR	103	41.3
1427	EST02463	Long-chain-fatty-acid-CoA ligase	A36275	PIR	36	62.2
313	EST00276	Lysosomal membrane glycoprotein 1 (LAMP-1)	A31959	PIR	53	46.3
161	EST00247	MARCKS (myristoylated alanine-rich protein kinase	BOVMARCKS	GB	139	83.6
1386	EST02418	MARCKS homolog	MMF52	EU	237	92.4
769	EST00734	MARCKS homolog	S08341	PIR	61	40.3
43	EST00371	Maternal G10 protein	S05955	PIR	38	92.3
1468	EST02505	Matrin 3	RATMATRIN3	GB	137	93.5
639	EST00632	Membrane transport superfamily (GTP-dependent)	A24400	PIR	63	39.1
1894	EST01643	Membrane transport superfamily (GTP-dependent)	A24400	PIR	71	50.0
824	EST01865	Microtubule-associated protein 1B	RATNEU	GB	293	86.4
223	EST00368	Microtubule-associated protein 1B	A33645	PIR	30	54.8
2032	EST01683	Microtubule-associated protein 1B	A33645	PIR	49	62.0
2017	EST01678	Milk fat globule membrane protein	A36479	PIR	48	61.2
1704	EST01580	Myeloid differentiation primary response gene MyD1	MUSMYD118_1	GPU	76	88.3
2226	EST01744	NAD(P)+ transhydrogenase (B-specific)	DEBOXM	PIR	86	93.1
1567	EST02610	Neural cell adhesion molecule L1	S05479	PIR	82	43.4
506	EST01471	Neurexin	S06017	PIR	120	84.3
1566	EST02609	Neutrophil oxidase factor	A34855	PIR	43	47.7
952	EST01961	Notch/Xotch	HUMTAN1_1	GPU	85	57.0
227	EST00259	Notch/Xotch	A35844	PIR	74	85.3
1395	EST02429	Nuclear factor 1-like protein (NF1)	HAMNF1A	GB	111	92.0
1681	EST01573	Nucleoside diphosphate kinase	A33386	PIR	71	52.8
346	EST01828	Otd homeotic protein	A35912	PIR	35	52.8
2254	EST01751	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase	A28807	PIR	40	90.2
1869	EST00992	Polymyxin B resistance	A32714	PIR	20	76.2
93	EST00287	Processing enhancing protein	S03968	PIR	96	58.8
2353	EST01806	Prohibitin	RATPROHIB_1	GPU	120	97.5
2297	EST01775	Prohormone cleavage enzyme	MUSMPC1A_1	GPU	91	93.5
9	EST00376	Prolyl endopeptidase	PIGPREP	GB	223	83.9
1069	EST02087	Protein kinase C, zeta	HUMPKCL	GB	382	58.7
1933	EST01650	Protein phosphatase 2A beta subunit	HUMPROP2AB	GB	288	76.8
202	EST00298	Protein-tyrosine phosphatase LRP	LRP\$MOUSE	SP	62	44.4
1654	EST01572	Protochlorophyllide reductase	S04783	PIR	34	57.1
38	EST00374	RNA polymerase II 6th subunit (RPO26)	A36352	PIR	72	75.3
1478	EST02515	Rab5	F34323	PIR	91	82.6
2368	EST01389	Radial spoke protein 3	S05962	PIR	58	52.5
37	EST00038	ras p21-like small GTP-binding protein (smg GDS)	BOVSMGGDS	GB	131	89.4
180	EST00299	ras-related proteins	S10493	PIR	51	46.1
1700	EST01579	Retrovirus-related gag polyprotein	FOHUE2	PIR	95	77.1
1511	EST02550	Retrovirus-related pol polyprotein	GNLJGL	PIR	50	54.9
102	EST00248	rho H12/ ARH12	BOVBGBRH	GB	195	79.6
1715	EST01583	Ribosomal protein L18a	R5RT18	PIR	68	95.7
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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Table 2: ESTs Identified by Database Matches

SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID
208	EST00250	60K filarial antigen	A28209	PIR	108	56.9
2320	EST01784	60K filarial antigen	A28209	PIR	88	50.6
969	EST01982	ADP-ribosylation factor 1	B33283	PIR	84	41.2
1834	EST01620	AMP deaminase, brain	A37056	PIR	57	100.0
97	EST00289	Aconitase	A35544	PIR	105	90.6
251	EST00370	Actin, other	S10021	PIR	44	51.1
248	EST00271	Actinin, alpha	HUMACTAR	GB	271	85.3
891	EST01891	Actinin, alpha	HUMACTAR	GB	315	81.6
1500	EST02538	Actinin, alpha	HUMACTAR	GB	271	75.0
132	EST00110	Agrin	RATAGR	GB	269	82.2
1852	EST01625	Agrin	RATAGR	GB	103	84.6
1094	EST02113	Ala	HUMALA	GB	92	82.8
691	EST00675	Alcohol dehydrogenase	RICGOS2G_1	GPU	38	59.0
2408	EST00244	Amyloid A4	HUMAFPA4	GB	135	91.9
1965	EST01664	Amyloid A4	A29030	PIR	52	54.7
2068	EST01694	Amyloid A4	QRHUA4	PIR	83	69.0
2092	EST01700	Anion exchanger homolog AE3	A33638	PIR	95	97.9
1880	EST01634	Axonal glycoprotein TAG-1	A34695	PIR	69	87.1
1492	EST02530	B cell-specific Mo-MLV integration site 1 (bmi-1)	MUSBMI1A	GB	111	87.5
1277	EST02306	Bib protein	S09699	PIR	57	53.4
13	EST00255	Cadherins	CADN\$HUMAN	SP	41	45.2
1348	EST02378	cAMP-dependent protein kinase inhibitor	MUSPKI	GB	234	91.5
1931	EST01041	cAMP-regulated phosphoprotein	B35308	PIR	21	86.4
1413	EST02447	cAMP-specific phosphodiesterase	HUMPDEAA	GB	363	69.0
396	EST01443	CDPdiacylglycerol-serine O-phosphatidyltransferase	JHO368	PIR	33	41.2
1956	EST01663	Ca2+-transporting ATPase 2	B28065	PIR	125	88.9
1126	EST02146	Calbindin D28	RATCALBD28	GB	81	87.8
1039	EST02055	Calcium channel	S05054	PIR	33	67.6
1910	EST01645	Calmodulin	RATRCM1	GB	120	90.1
485	EST01466	Calmodulin-dependent protein kinase, type II, beta	A26464	PIR	93	98.9
913	EST01913	Clathrin coat assembly protein AP50 homolog	YSCYAP54_1	GPU	62	63.5
2004	EST01676	Cofilin	PIGCOFIL	GB	132	89.5
2400	EST01824	Cysteine-rich intestinal protein	GYRTI	PIR	56	66.7
1588	EST02633	D22Z3 repetitive DNA	HUMREP	GB	160	76.4
2192	EST01257	Diacylglycerol kinase, lymphocyte	S09156	PIR	44	42.2
1441	EST02477	Diamine acetyltransferase	ATDA\$HUMAN	SP	74	45.3
650	EST00642	Dilute (myosin heavy chain)	MUSDILUTE_1	GPU	27	100.0
2302	EST01779	Discs-large tumor suppressor	DRODLGA_1	GPU	53	63.0
188	EST00256	Enhancer of split	A30047	PIR	86	58.6
2289	EST01325	Fatty acid synthase	RATFAS	GB	98	79.8
310	EST00377	Fo ATPase beta subunit, mitochondrial	BOVMTASB	GB	293	85.4
1332	EST02362	GA binding protein, beta subunit	MUSGAC_1	GPU	86	90.8
1667	EST00825	Gamma-aminobutyric acid transporter	A35918	PIR	26	59.3
2217	EST01738	Gelation factor ABP-280	A37098	PIR	74	80.0
1412	EST02446	Glutamate-aspartate carrier protein	JV0092	PIR	57	37.9
1020	EST02034	Glutaminase	GLS\$RAT	SP	34	74.3
1885	EST01639	Histocompatibility antigen modifier 1	A37779	PIR	63	75.0
1495	EST02533	Hypothetical 43.5K protein	JU0319	PIR	43	52.3
2326	EST01791	Inositol-1,4,5-trisphosphate 3-kinase	JN0129	PIR	65	68.2
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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big-brain (bib) (Rao, Y., Jan, L., & Jan, Y. **Nature** 345: 163-167 (1990)), the discs tumor suppressor (Woods, D. & Bryant, P. **Cell** 66: 1-20 (1991)), and the homeotic gene orthodenticle (Finkelstein, R., Smouse, D. Capaci, T., Spradling, A. & Perrimon, N. **Genes. Dev.** 4: 1516-1527 (1990)). New members of gene families previously known in humans include a Ca^{+2} -transporting ATPase, an ADP ribosylation factor, and a new neural-cell adhesion molecule gene.

The 1971 ESTs without a putative identification were analyzed using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. **Proc. Natl. Acad. Sci. USA** 88: 11261-5 (1991)). Fifteen percent of the unknown ESTs scored an excellent probability of containing protein-coding sequence. Fifty percent of the ESTs to known human genes contain protein-coding sequences, therefore, at most half of the unknown ESTs are likely to contain coding sequences. We have found no evidence that genomic DNA or cDNA to unspliced precursor RNA is a major contaminant of either the hippocampus or fetal brain library.

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actin (3), λ -actin (2), α -tubulin (2), α -2-macroglobulin (2), and 2'3'-cyclic-nucleotide-3'-phosphodiesterase (2). Those few instances where two or more ESTs represent different portions of a single cDNA can be readily ascertained when the sequence of the full cDNA insert is determined in accordance with Example 13.

Example 4

EST Sequences Characterization: Second Set

The ESTs of Example 2, including SEQ ID NOS 316-2407, were screened against known sequences listed in GenBank and other databases, as in Example 3. The results are reported in Table 2. The quality of the match is given as percent identity and length in base pairs for nucleotide matches and amino acid residues for peptide matches. In many cases ESTs match multiple domains on several related proteins; for example, EST00825 matches two transmembrane domains on both GABA and Norepinephrine transporters. Nucleotide databases are: GenBank (GB), and EMBL (E); peptide databases are: GenPept (GPU), Swiss-Prot (SP), and PIR.

The great majority (83%) of the partial cDNA sequences reported in Example 2 are unrelated to any sequences previously described in the literature. Based on database matches to known genes from humans as well as from such evolutionarily distant organisms as *E. coli*, yeast, *C. elegans*, *Drosophila*, barley, *Arabidopsis*, rice, and green algae, we have preliminarily identified the functional type of a number of the ESTs (Table 2). These include a novel gene similar to Notch/Tan-1 (Adams et al., *supra*), a new neurotransmitter transporter gene, and a new member of the multi-drug resistance gene family. Several genes involved in development or cell differentiation in *Drosophila* are represented by similar human ESTs, including seven in *absentia* (Carthew, R. & Rubin, G. Cell 63: 561-577 (1990)),

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EST00271 (SEQ ID NO:248) matched α -actinin with 85% identity at the nucleotide level.

Among the most interesting of the primary sequence relationships was the similarity of ESTs to the *Drosophila* genes Notch and Enhancer of split. Nucleotide and peptide alignments of EST00256 (SEQ ID NO:188) and EST00259 (SEQ ID NO:227) with the *Drosophila* genes have been demonstrated. Both genes are part of a signal cascade encoded by the "neurogenic" genes that are involved in the differentiation of neuronal and epidermal cell lineages in the neuroectoderm of the developing *Drosophila* embryo (Campos-Ortega, *Trends in Neuro. Sci.* 11: 400 (1988)). It has been proposed that the Enhancer of split protein interacts with a membrane protein that is the product of the Notch gene to convert a developmental signal into an altered pattern of gene expression (id. *J. Mol. Biol.* 215: 403 (1990)). EST00256 (SEQ ID NO:188) matches near the 5' end of the Enhancer of split coding sequence, away from the mammalian G protein β subunit- and yeast cdc4-like elements (Hartley et al, *Cell* 55: 785 (1988); Klambt et al. *EMBO J.* 8: 203 (1989)). Part of the EST00259 (SEQ ID NO:227) match to Notch in the cdc10/SW16 region that is similar to three cell-cycle control genes in yeast and is tightly conserved in the *Xenopus* Notch homolog, Xotch. In *Drosophila*, Enhancer of split is absolutely required for formation of epidermal tissue. Notch contains several epidermal growth factor-like repeats and appears to play a general role in cell-cell communication during development (Banerjee and Zipursky, *Neuron* 4:177 (1990)).

Seven genes were represented by more than one EST. Comparisons of all the ESTs against one another revealed two overlaps of unknown ESTs: EST00233 (SEQ ID NO:32) and EST00234 (SEQ ID NO:8) match in opposite orientations and EST00235 (SEQ ID NO:204) and EST00236 (SEQ ID NO:148) match in the same orientation beginning at the same nucleotide. Five human genes were represented by more than one EST: β -

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fodrin (non-erythroid spectrin). ESTs also document the presence in the hippocampus cDNA library of the ret proto-oncogene, the ras-related gene rhoB, and one of the chromosome 22 breakpoint cluster region transcripts. Eight ESTs are from genes known to be associated with genetic disorders (Online Mendelian Inheritance in Man). More than half of the human-matched ESTs from Example 1 have been mapped to chromosomes, indicating the bias of GenBank entries toward well-studied genes and proteins.

ESTs without significant GenBank matches were also compared to the ProSite database of recognized protein motifs. Not counting post-translational-modification signatures, fifty-four sequences contained motifs from the database. Some patterns, particularly the "leucine zipper", are found in scores or hundreds of proteins that do not share the functional property implied by the presence of the motif.

Similarities to sequences from other organisms were also detected in the BLAST searches of GenBank and PIR (Table 2). Several ESTs displayed similarity to "housekeeping" genes, including the ribosomal proteins S10 and L30 (rat) and the above glycolytic enzymes. EST00257 (SEQ ID NO:77) shows strong nucleotide sequence similarity to the squid (67%) and *Drosophila* (70.4%) kinesin heavy chain. Kinesin was first described as a microtubule-associated motor protein involved in organelle transport in the squid giant axon (Vale et al, *Cell* 42: 39 (1985)). Six oncogene-related sequences were also among the cDNA clones sequenced. EST00299 (SEQ ID NO:180) and EST00283 (SEQ ID NO:271) show similarity to several ras-related genes and EST00248 (SEQ ID NO:102) matched the 3' untranslated region of the bovine substrate of botulinum toxin ADP-ribosyltransferase. Similarities with an *S. cerevisiae* RNA polymerase subunit and Torpedo electromotor neuron-associated protein were also observed. Two ESTs may represent new members of known human gene families: EST00270 matched the three β -tubulin genes with 88-91% identity and

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After the BLASTN search, 30 unmatched ESTs were compared against GenBank by FASTA to determine if significant matches were missed due to the use of BLASTN for the database search. No additional statistically significant matches were found. Statistical significance does not necessarily mean functional similarity; some of the reported matches may indicate the presence of a conserved domain or motif or simply a common protein structure pattern. Those ESTs identified as fully corresponding to known human genes or proteins are not included in this disclosure. Statistically significant matches are reported in Table 2, together with the length and percent identity or similarity of each alignment.

On the basis of database searches, 609 EST sequences were classified into eight groups as shown in Table 1 (see Example 1 above). Four groups, with 197 or 32% of the sequences, consist of matches to human sequences: repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes. Forty-eight (8%) of the sequences matched non-human entries in GenBank or PIR while 230 (38%) had no significant matches. The remaining 134 (22%) sequences contained no insert or consisted entirely of polyA between the EcoRI cloning sites.

Thirty-six ESTs matched previously sequenced human nuclear genes with more than 97% identity. Four of these ESTs are from genes encoding enzymes involved in maintaining metabolic energy, including ADP/ATP translocase, aldolase C, hexokinase, and phosphoglycerate kinase. Human homologs of genes for the bovine mitochondrial ATP synthase $F_0\beta$ -subunit and porcine aconitase were also found (Table 2). Brain-specific cDNAs included synaptophysin, glial fibrillary acidic protein (GFAP), and neurofilament light chain. At least six ESTs are from genes encoding proteins involved in signal transduction: 2',3'-cyclic nucleotide 3'-phosphodiesterase (2 ESTs), calmodulin, c-erbA- α -2, $G_s\alpha$, and Na^+/K^+ ATPase α -subunit. Other ESTs were matches to genes for ubiquitous structural proteins -- actins, tubulins, and

EXAMPLE 3

EST Characterization: First Set

ESTs including SEQ ID NOs 1-315 were analyzed as follows. Initially, the EST sequences were examined for similarities in the GenBank nucleic acid database (GenBank Release 65.0), Protein Information Resource Release 26.0 (PIR), and ProSite (MacPattern from the EMBL data library, Fuchs R. *Comput. Appl. Biosci.* 7: 105 (1990) Release 5.0 were used). BLAST was used to search Genbank and the PIR (both maintained by the National Center for Biotechnology Information) ESTs without exact GenBank matches were translated in all six reading frames and each translation was compared with the protein sequence database PIR and the ProSite protein motif database. Comparisons with the ProSite motif database were done by means of the program MacPattern from the EMBL Data Library. GenBank and PIR searches were conducted with the "basic local alignment search tool" programs for nucleotide (BLASTN) and peptide (BLASTX) comparisons (Altschul et al, *J. Mol. Biol.* 215: 403 (1990)). PIR searches were run on the National Center for Biotechnology Information BLAST network service. The BLAST programs contain a very rapid database-searching algorithm that searches for local areas of similarity between two sequences and then extends the alignments on the basis of defined match and mismatch criteria. The algorithm does not consider the potential gaps to improve the alignment, thus sacrificing some sensitivity for a 6-80 fold increase in speed over other database-searching programs such as FASTA (Pegaron and Lipman, *Proc. Natl. Acad. Sci. USA*, 85: 2444 (1988)).

Sequence similarities identified by the BLAST programs were considered statistically significant with a Poisson P-value than 0.01. The Poisson P-value less than the probability of as high a score occurring by chance given the number of residues in the query sequence and the database.

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216: 1065-1070 (1982); Paulson, K. E., Deka, N., Schmid, C. W., Misra, R., Schlinder, C. W., Rush, M. G., Kadyk, L., & Leinwand, L. *Nature* 316: 359-361 (1985); Fanning, T. G. & Singer, M. F. *Biochem. Biophys. Acta* 910: 203-212 (1987))

5 were searched against all of GenBank and, in 6-frame translation, against a comprehensive, non-redundant peptide database using the network BLAST (Altschul, S. F., Gish, W., Miller, W., Myers, E.W., & Lipman, D. J. *Mol. Biol.* 215: 403-410 (1990)) server at the National Center for

10 Biotechnology Information. BLAST output was parsed, and an interactive alignment editor was used to select which matches, if any, from each search to record in a relational EST database, which was developed to track sequencing, identification, tissue localization, physical mapping, and

15 the public distribution of the clones, mapping and sequence data. For significant similarities, a putative gene name and Protein Identification Resource (PIR) gene family identification (Barker, W., George, D., Hunt, L., & Garavelli, J. *Nucl. Acids Res.* 19 (Suppl): 2231-2236 (1991))

20 for the EST were assigned. ESTs without significant matches using BLAST were searched in translation against PIR using FASTA. Ten additional marginal matches were found. A total of 2300 new EST sequences comprising 765,505 nucleotides from the current data set have been submitted to GenBank and

25 assigned accession numbers M77851-M79278 and M85308-M86179. All ESTs except those multiply representing actin, tubulin, and myelin basic protein clones were submitted. ATCC accession numbers of cDNA clones from which ESTs were derived are 77501-78999 and 81000-81756. The Genome Data Base

30 expressed D-segment numbers for these clones are D0S1E - D0S2422E. The ESTs from this Example are identified herein as SEQ ID NOS 316-2407.

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EXAMPLE 2

Sequencing of Additional ESTs: Second set

Over 2600 additional cDNA clones have been isolated, partially sequenced and screened. The clones were isolated from four human brain cDNA libraries. The new sequences thus discovered, together with the 315 brain ESTs from Example 1, correspond to over 2400 new human genes. These data represent an approximate doubling of the number of human genes identified by DNA sequencing.

Specifically, four cDNA libraries were used as sources of clones for sequencing. Human hippocampus and fetal brain libraries, plasmid template preparation, sequencing reactions, and automated sequencing were performed as described (Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., & Venter, J.C. *Science*, 252: 1651-56 (1991)). A pooled probe consisting of inserts from 10 different EST clones with sequences that matched either mitochondrial genes or the 18S or 28S ribosomal RNAs was used to prescreen a gridded filter array of the hippocampus library; nonhybridizing clones are referred to as the "prescreened library". Another fetal brain library was constructed by and was a gift from Bento Soares (Columbia University). A directionally-cloned library was prepared using the method of Rubenstein, et al. (Rubenstein, J., Elizabeth, A., Brice, A., Ciaranello, R., Denney, D., Porteus, M. & Usdin, T. *Nucl. Acids Res.* 18: 4833-4842) using human adult brain mRNA purchased from Clontech (Palo Alto, CA; Catalogue # 6516-1). Of 482 clones analyzed by restriction enzyme digestion, 33% contained inserts at least 1500 base pairs in length. Stratagene hippocampus and fetal brain library totals include data from Adams et al *Science* 252: 1651.

Sequences of nuclear-encoded cDNAs that did not include interspersed repeats (Schmid, C. W. & Jelinek, W. R. *Science*

TABLE 1. cDNA Library Composition Determined
By Random Clone Sequencing

ESI Category	Hippocampus		Hippocampus Subtracted		Fetal Brain		Temporal Cortex	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Databases Match--Human	48	12.8	10	8.6	3	7.9	6	7.5
Mitochondrial Genes	39	10.4	14	12.2	6	15.8	0	0
Repeats: Alu, Line-1, etc.	10	2.7	7	6.0	0	0	11	13.8
Ribosomal RNA	32	8.6	7	6.0	4	10.5	0	0
Other Nuclear Genes	32	8.6	7	6.0	5	13.2	4	5.0
Database Match--Other	160	42.8	44	37.9	20	52.6	6	7.5
No Database Match	53	14.1	24	20.7	0	0	27	33.7
poly A Insert	1	0.3	3	2.6	0	0	26	32.5
No Insert								

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(1988)). Clones from this subtraction are listed in the column "Hippocampus Subtracted" in Table 1.

The EST sequences from this Example 1 are identified as SEQ ID NOS 1-315.

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universal or reverse primers. After a cycle sequencing protocol, carried out in a Perkin-Elmer thermal cycler, sequencing reactions were run on an Applied Biosystems, Inc. (Foster City, CA) 373A automated DNA sequencer. (Cycle sequencing was performed in a Perkin Elmer Thermal Cycler for 15 cycles of 95°C, 30 sec; 60°C, 1 sec; 70°C, 60 sec and 15 cycles of 95°C, 30 sec; 70°C, 60 sec with the Applied Biosystems, Inc. Taq Dye Primer Cycle Sequencing Core Kit protocol). Some sequencing reactions were performed on an ABI robotic workstation (Cathcart, *Nature* 347: 310 (1990) hereby incorporated by reference).

RESULTS:

Singe-run DNA sequence data were obtained from 609 randomly chosen cDNA clones. The number of clones sequenced from each library is summarized in Table 1. Double-stranded cDNA clones in the pBluescript vector were sequenced by a cycle sequencing protocol with dye-labeled primers and Applied Biosystems, Inc. 373A DNA Sequences. The average length of usable sequence was 397 bases with a standard deviation of 99 bases.

Subtractive hybridization has been used successfully to reduce the population of highly represented sequences in a cDNA library by selectively removing sequences shared by another library. (Schmid and Girou, *Neurochem.* 48: 307 (1987); Fargnoli et al, *Anal. Biochem.* 187: 364 (1990); Duguid and Dinauer, *Nucl. Acids. Res.* 18: 2789 (1990); Schweinfest, et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Travis and Sutcliffe, *Proc. Natl. Acad. Sci. USA* 85: 1696 (1988); Kato, *Eur. J. Neurosci.* 2: 704 (1990)). Subtractive hybridization was therefore tested as a way of enhancing the number of brain-specific clones in the hippocampus library by hybridizing the hippocampus library with a WI38 human lung fibroblast cell line cDNA library and removing the common sequences (Schweinfest et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Sive and St. John, *Nucl. Acids Res.* 16: 10937

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EXAMPLE 1

cDNA Sequences Determined by Random
Clone Selection: First set

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METHODOLOGY:

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With reference to the data presented in Table 1, lambda ZAP libraries were converted en masse to pBluescript plasmids, transfected into E. coli XL1-Blue cells, and plated on X-gal/IPTG/ampicillin plates. A total of 1058 clones were picked at random from three human brain cDNA libraries: fetal brain, two-year-old hippocampus, and two-year-old temporal cortex (Stratagene catalog #936206, 936205, 935, respectively. Stratagene, 11099 N. Torrey Pines Rd., La Jolla, CA 92037). An analysis of these clones is summarized in Table I (see below) In addition, clones selected from the hippocampus library were also analyzed after subtractive hybridization with the fibroblast library. These results are listed in the "Hippocampus Subtracted" column of Table 1. Templates for DNA sequencing were PCR products or plasmids prepared by the alkaline lysis method. About half of the templates prepared by PCR failed to yield an amplified fragment suitable for sequencing. This was primarily due to use of PCR conditions that minimized the need for further purification of the product but also selected against amplification of long inserts (5 μ l fresh or frozen overnight culture of E. coli carrying the pBluescript plasmid, 7.5 μ M each dNTP, and 0.1 μ M each primer for 35 cycles: 94°C, 40 sec; 55°C, 40 sec; 72°C, 90 sec). A further percentage of the PCR-generated templates failed to sequence, largely due to primer-dimer or other amplification artifacts. Qiagen™ columns improved the percentage of plasmid templates, increasing the yields of usable sequence from about 60% with a standard alkaline lysis protocol to over 90%. Overall, 117 PCR-generated templates and 497 plasmid templates resulted in usable sequence. Dideoxy chain termination sequencing reactions were performed with fluorescent dye-labeled M13

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particularly useful in producing small peptides and fragments of larger polypeptides. (Fragments are useful, for example, in generating antibodies against the native polypeptide.)

Alternatively, the DNA encoding the desired polypeptide
5 can be inserted into a host organism and expressed. The organism can be a bacterium, yeast, cell line, or multicellular plant or animal. The literature is replete with examples of suitable host organisms and expression techniques. For example, naked polynucleotide (DNA or mRNA)
10 can be injected directly into muscle tissue of mammals, where it is expressed. This methodology can be used to deliver the polypeptide to the animal, or to generate an immune response against a foreign polypeptide. Wolff, et al., *Science* 247:1465 (1990); Felgner, et al., *Nature* 349:351 (1991).
15 Alternatively, the coding sequence, together with appropriate regulatory regions (i.e., a construct), can be inserted into a vector, which is then used to transfect a cell. The cell (which may or may not be part of a larger organism) then expresses the polypeptide. (See Example 25.)

20 Antibodies generated against the polypeptide corresponding to a sequence of the present invention can be obtained by direct injection of the naked polypeptide into an animal (as above) or by administering the polypeptide to an animal, preferably a nonhuman. The antibody so obtained will
25 then bind the polypeptide itself. In this manner, even a sequence encoding only a fragment of the polypeptide can be used to generate antibodies binding the whole native polypeptide. Such antibodies can then be used to isolate the polypeptide from tissue expressing that polypeptide.
30 Moreover, a panel of such antibodies, specific to a large number of polypeptides, can be used to identify and differentiate such tissue.

VI. Examples

35 Certain aspects of the present invention are described in greater detail in the non-limiting Examples that follow.

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(1992)). Once this specific area of the genome is amplified, it is digested with one or more restriction enzymes to yield an identifying set of bands on a Southern blot probed with DNA corresponding to the DQ α class II HLA gene.

5 The sequences of the present invention can be used to provide polynucleotide reagents specifically targeted to additional loci in the human genome, and can enhance the reliability of DNA-based forensic identifications. Those sequences targeted to noncoding regions (see, e.g., Tables 8
10 and 9) are particularly appropriate. As mentioned above, actual base sequence information can be used for identification as an accurate alternative to patterns formed by restriction enzyme generated fragments. Reagents for obtaining such sequence information are within the scope of
15 the present invention. Such reagents can comprise complete ESTs or corresponding coding regions, or fragments of either of at least 15 bp, preferably at least 18 bp.

There is also a need for reagents capable of identifying the source of a particular tissue. Such need arises, for
20 example, in forensics when presented with tissue of unknown origin. Appropriate reagents can comprise, for example, DNA probes or primers specific to particular tissue prepared from the ESTs or complete sequences of the present invention. Panels of such reagents can identify tissue by species and/or
25 by organ type. In a similar fashion, these reagents can be used to screen tissue culture for contamination.

V. Production of Polypeptide Corresponding to ESTs

As previously explained, each EST corresponds not only
30 to a coding region, but also to a polypeptide. Once the coding sequence is known, or the gene is cloned which encodes the polypeptide, conventional techniques in molecular biology can be used to obtain the polypeptide.

At the simplest level, the amino acid sequence encoded
35 by the polynucleotide sequence can be synthesized using commercially available peptide synthesizers. This is

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obtain such identification sequences from individuals and from tissue, as explained in Examples 12 - 14.

5 The EST sequences from Examples 1 and 2 and the complete sequences from Example 13 uniquely represent portions of the human genome. Allelic variation occurs to some degree in the coding regions of these sequences, and to a greater degree in the noncoding regions. It is estimated that allelic variation between individual humans occurs with a frequency of about once per each 500 bases. Each of the ESTs or complete coding sequences comprising a part of the present invention can, to some degree, be used as a standard against which DNA from an individual can be compared for identification purposes. Because greater numbers of polymorphisms occur in the noncoding regions, fewer sequences are necessary to differentiate individuals. The noncoding sequences of Table 9 for example, could comfortably provide positive individual identification with a panel of perhaps 100 to 1,000 primers which each yield a noncoding amplified sequence of 100 bp. If predicted coding sequences, such as those from Table 6, are used, a more appropriate number of primers for positive individual identification would be 500-2,000.

25 If a panel of reagents from ESTs or complete sequences of this invention is used to generate a unique ID database for an individual, those same reagents can later be used to identify tissue from that individual. Positive identification of that individual, living or dead can be made from extremely small tissue samples.

30 Another use for DNA-based identification techniques is in forensic biology. PCR technology can be used to amplify DNA sequences taken from very small biological samples such as tissues, e.g., hair or skin, or body fluids, e.g., blood, saliva, semen, etc. In one prior art technique, gene sequences are amplified at specific loci known to contain a large number of allelic variations, for example the DQ α class II HLA gene (Erlich, H., PCR Technology, Freeman and Co.

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The present invention is also useful tool in gene therapy, which requires isolation of the disease-associated gene in question as a prerequisite to the insertion of a normal gene into an organism to correct a genetic defect. 5 high specificity of the cDNA probes according to this invention have promise of targeting such gene locations in a highly accurate manner.

The sequences of the present invention, as broadly defined, are also useful for identification of individuals 10 from minute biological samples. The United States military, for example, is considering the use of restriction fragment length polymorphism (RFLP) for identification of its personnel. In this technique, an individual's genomic DNA is digested with one or more restriction enzymes, and probed on 15 a Southern blot to yield unique bands for identifying personnel. This method does not suffer from the current limitations of "Dog Tags" which can be lost, switched, or stolen, making positive identification difficult. The sequences of the present invention are useful as additional 20 DNA markers for RFLP.

However, RFLP is a pattern based technique, which does not directly focus on the actual DNA sequence of the individual. The sequences of the present invention can be used to provide an alternative technique that determines the 25 actual base-by-base DNA sequence of selected portions of an individual's genome. These sequences can be used to prepare PCR primers for amplifying and isolating such selected DNA. One can, for example, take an EST of the invention and prepare two PCR primers from the 5' and 3' ends of the EST. 30 These are used to amplify an individual's DNA, corresponding to the EST. The amplified DNA is sequenced.

Panels of corresponding DNA sequences from individuals, made this way, can provide unique individual identifications, as each individual will have a unique set of such DNA 35 sequences, due to allelic differences. The sequences of the present invention can be used to particular advantage to

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the mutation is likely to be the causative agent of the disease.

With current resolution of physical mapping and genetic mapping techniques, a cDNA precisely localized to a chromosomal region associated with the disease could be one of between 50 and 500 potential causative genes. (This assumes 1 megabase mapping resolution and one gene per 20 kb.)

Comparison of affected and unaffected individuals generally involves first looking for structural alterations in the chromosomes, such as deletions or translocations that are visible from chromosome spreads or detectable using PCR based on that cDNA sequence. Ultimately, complete sequencing of genes from several individuals is required to confirm the presence of a mutation and to distinguish mutations from polymorphisms.

In addition to the foregoing, the sequences of the invention, as broadly described, can be used to control gene expression through triple helix formation or antisense DNA or RNA, both of which methods are based on binding of a polynucleotide sequence to DNA or RNA. Polynucleotides suitable for use in these methods are usually 20 to 40 bases in length and are designed to be complementary to a region of the gene involved in transcription (triple helix - see Lee et al, *Nucl. Acids Res.* 6: 3073 (1979); Cooney et al, *Science* 241: 456 (1988); and Dervan et al, *Science* 251: 1360 (1991)) or to the mRNA itself (antisense - Okano, *J. Neurochem.* 56: 560 (1991); *Oligodeoxynucleotides as Antisense Inhibitors of Gene Expression*, CRC Press, Boca Raton, FL (1988)). Triple helix formation optimally results in a shut-off of RNA transcription from DNA, while antisense RNA hybridization blocks translation of an mRNA molecule into polypeptide. Both techniques have been demonstrated to be efficient in model systems. Information contained in the sequences of the present invention is necessary for the design of an antisense or triple helix oligonucleotide.

Fluorescence in situ hybridization (FISH) of a cDNA clone to a metaphase chromosomal spread can be used to provide a precise chromosomal location in one step. This technique can be used with cDNA as short as 500 or 600 bases; however, clones larger than 2,000 bp have a higher likelihood of binding to a unique chromosomal location with sufficient signal intensity for simple detection. FISH requires use of the clone from which the EST was derived, and the longer the better. 2,000 bp is good, 4,000 is better, and more than 4,000 is probably not necessary to get good results a reasonable percentage of the time. For a review of this technique, see Verma et al., **Human Chromosomes: a Manual of Basic Techniques**. Pergamon Press, New York (1988).

Reagents for chromosome mapping can be used individually (to mark a single chromosome or a single site on that chromosome) or as panels of reagents (for marking multiple sites and/or multiple chromosomes). Reagents corresponding to noncoding regions of the genes actually are preferred for mapping purposes. Coding sequences are more likely to be conserved within gene families, thus increasing the chance of cross hybridizations during chromosomal mapping (see Tables 8 and 9).

Once a sequence has been mapped to a precise chromosomal location, the physical position of the sequence on the chromosome can be correlated with genetic map data. (Such data are found, for example, in V. McKusick, **Mendelian Inheritance in Man** (available on line through Johns Hopkins University Welch Medical Library).) The relationship between genes and diseases that have been mapped to the same chromosomal region are then identified through linkage analysis (coinheritance of physically adjacent genes).

Next, it is necessary to determine the differences in the cDNA or genomic sequence between affected and unaffected individuals. If a mutation is observed in some or all of the affected individuals but not in any normal individuals, then

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Each sequence is specifically targeted to and can hybridize with a particular location on an individual human chromosome. Moreover, there is a current need for identifying particular sites on the chromosome. Few chromosome marking reagents based on actual sequence data (repeat polymorphisms) are presently available for marking chromosomal location. The present invention constitutes a major expansion of available chromosome markers. One hundred ESTs have already been mapped to chromosomes. Using the techniques described in Example 5 or 6, the remaining ESTs and the corresponding complete sequences can similarly be mapped to chromosomes. The mapping of ESTs and cDNAs to chromosomes according to the present invention is an important first step in correlating those sequences with genes associated with disease.

Briefly, sequences can be mapped to chromosomes by preparing PCR primers (preferably 15-25 bp) from the ESTs. Computer analysis of the ESTs is used to rapidly select primers that do not span more than one exon in the genomic DNA, thus complicating the amplification process. These primers are then used for PCR screening of somatic cell hybrids containing individual human chromosomes. Only those hybrids containing the human gene corresponding to the EST will yield an amplified fragment.

PCR mapping of somatic cell hybrids is a rapid procedure for assigning a particular EST to a particular chromosome. Three or more clones can be assigned per day using a single thermal cycler. Using the present invention with the same oligonucleotide primers, sublocalization can be achieved with panels of fragments from specific chromosomes or pools of large genomic clones in an analogous manner. Other mapping strategies that can similarly be used to map an EST to its chromosome include in situ hybridization, prescreening with labeled flow-sorted chromosomes and preselection by hybridization to construct chromosome specific cDNA libraries. Results of mapping ESTs to chromosomal segments are listed in Tables 3 and 4.

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can be synthetically produced by conventional peptide synthesizers.

Certain ESTs have already been preliminarily categorized by analogy to related sequences in other organisms (see Table 2). Table 10 of Example 10 categorizes particular ESTs broadly as metabolic, regulatory, and structural sequences where known. Constructs comprising genes or coding sequences corresponding to each of these categories are, therefore, specifically and individually contemplated.

Table 11 more particularly separates 127 new ESTs into 13 categories using a different criteria. These are genes related to cell surface; developmental control; energy metabolism; kinase and phosphatase; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. Table 11 further identifies the EST by the particular gene product for which it apparently codes. Each of these categories individually comprises a preferred category of EST, and preferred constructs and resulting polypeptide can be prepared from those ESTs or the corresponding complete gene sequence.

IV. ESTs and Corresponding Sequences as Reagents

Each of the cDNA sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. The sequences can be used as diagnostic probes for the presence of a specific mRNA in a particular cell type. In addition, these sequences can be used as diagnostic probes suitable for use in genetic linkage analysis (polymorphisms). Further, the sequences can be used as probes for locating gene regions associated with genetic disease, as explained in more detail below.

The EST and complete gene sequences of the present invention are also valuable for chromosome identification.

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a plasmid or viral vector, into which a sequence of the invention has been inserted, in a sense or antisense orientation. In a preferred aspect of this embodiment, the construct further comprises regulatory sequences, including for example, a promoter, operably linked to the sequence. Large numbers of suitable vectors and promoters are known to those of skill in the art, and are commercially available. The following vectors are provided by way of example.

Bacterial: pBs, phagescript, ϕ X174, pBluescript SK, pBs KS, pNH8a, pNH16a, pNH18a, pNH46a (Stratagene); pTrc99A, pKK223-3, pKK233-3, pDR540, pRIT5 (Pharmacia).

Eukaryotic: pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene); pSVK3, pBPV, pMSG, pSVL (Pharmacia).

Promoter regions can be selected from any desired gene using CAT (chloramphenicol transferase) vectors or other vectors with selectable markers. Two appropriate vectors are pKK232-8 and pCM7. Particular named bacterial promoters include lacI, lacZ, T3, T7, gpt, lambda P_R, and trc. Eukaryotic promoters include CMV immediate early, HSV thymidine kinase, early and late SV40, LTRs from retrovirus, and mouse metallothionein-I. Selection of the appropriate vector and promoter is well within the level of ordinary skill in the art.

In a further embodiment, the present invention relates to host cells containing the above-described construct. The host cell can be a higher eukaryotic cell, such as a mammalian cell, or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a procaryotic cell, such as a bacterial cell. Introduction of the construct into the host cell can be effected by calcium phosphate transfection, DEAE dextran mediated transfection, or electroporation (Davis, L., Dibner, M., Battey, I., **Basic Methods in Molecular Biology**, (1986)).

The constructs in host cells can be used in a conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

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natural material to at least one order of magnitude, preferably two or three orders, and more preferably four or five orders of magnitude is expressly contemplated.

5 In a cDNA library there are many species of mRNA represented. Each cDNA clone can be interesting in its own right, but must be isolated from the library before further experimentation can be completed. In order to sequence any specific cDNA, it must be removed and separated (i.e. isolated and purified) from all the other sequences. This
10 can be accomplished by many techniques known to those of skill in the art. These procedures normally involve identification of a bacterial colony containing the cDNA of interest and further amplification of that bacteria. Once a cDNA is separated from the mixed clone library, it can be
15 used as a template for further procedures such as nucleotide sequencing.

Although claims to large numbers of ESTs and corresponding sequences are presented herein, the invention is not limited to these particular groupings of sequences.
20 Thus, individual sequences are considered as applicants' discoveries or inventions, as are subgroupings of sequences. All of the functional subgroupings set forth in the tables define groupings for which separate claims are contemplated as being within the scope of this invention. Moreover, in
25 addition to claims to individual clones, it is intended that the present disclosure also support claims to numerical subgroupings. Thus, subgroupings of 50 ESTs (and corresponding sequences) are contemplated (e.g., SEQ ID NOS 1-50, 51-100, 101-150, etc.) as being within the scope of
30 this invention, as are subgroupings of 5, 10, 25, 100, 200, and 500 ESTs and corresponding sequences.

III. DNA Constructs

35 The present invention also includes recombinant constructs comprising one or more of the sequences as broadly described above. The constructs comprise a vector, such as

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The sequences, constructs, vectors, clones, and other materials comprising the present invention can advantageously be in enriched or isolated form. As used herein, "enriched" means that the concentration of the material is at least about 2, 5, 10, 100, or 1000 times its natural concentration (for example), advantageously 0.01%, by weight, preferably at least about 0.1% by weight. Enriched preparations of about 0.5%, 1%, 5%, 10%, and 20% by weight are also contemplated. Further, removal of clones corresponding to ribosomal RNA and "housekeeping" genes and clones without human cDNA inserts results in a library that is "enriched" in the desired clones.

The term "isolated" requires that the material be removed from its original environment (e.g., the natural environment if it is naturally occurring). For example, a naturally-occurring polynucleotide present in a living animal is not isolated, but the same polynucleotide, separated from some or all of the coexisting materials in the natural system, is isolated.

It is also advantageous that the sequences be in purified form. The term "purified" does not require absolute purity; rather, it is intended as a relative definition. Individual EST clones isolated from a cDNA library have been conventionally purified to electrophoretic homogeneity. The sequences obtained from these clones could not be obtained directly either from the library or from total human DNA. The cDNA clones are not naturally occurring as such, but rather are obtained via manipulation of a partially purified naturally occurring substance (messenger RNA). The conversion of mRNA into a cDNA library involves the creation of a synthetic substance (cDNA) and pure individual cDNA clones can be isolated from the synthetic library by clonal selection. Thus, creating a cDNA library from messenger RNA and subsequently isolating individual clones from that library results in an approximately 10^6 -fold purification of the native message. Purification of starting material or

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Gocayne, J.D., Ward, D.C., and Venter, J.C. *Genomics* 10: 985-995 (1991). Although the process is much more laborious, these genomic clones can be sequenced in their entirety also. A shotgun approach is preferred to sequencing clones with inserts longer than 10 kb (genomic cosmid and lambda clones). In shotgun sequencing, the clone is randomly broken into many small pieces, each of which is partially sequenced. The sequence fragments are then aligned to produce the final contiguous sequence with high redundancy. An intermediate approach is to sequence just the promoter region and the intron-exon boundaries and to estimate the size of the introns by restriction endonuclease digestion (ibid.).

Using the sequence information provided herein, the polynucleotides of the present invention can be derived from natural sources or synthesized using known methods. The sequences falling within the scope of the present invention are not limited to the specific sequences described, but include human allelic and species variations thereof and portions thereof of at least 15-18 bases. (Sequences of at least 15-18 bases can be used, for example, as PCR primers or as DNA probes.) In addition, the invention includes the entire coding sequence associated with the specific polynucleotide sequence of bases described in the Sequence Listing, as well as portions of the entire coding sequence of at least 15-18 bases and allelic and species variations thereof. Furthermore, to accommodate codon variability, the invention includes sequences coding for the same amino acid sequences as do the specific sequences disclosed herein. Finally, although the error rate in the automated sequencing used in the present invention is small, there remains some chance of error. Therefore, claims to particular sequences should not be so narrowly construed as to require inclusion of erroneously identified bases or to exclude corrections.

Any specific sequence disclosed herein can be readily screened for errors by resequencing each EST in both directions (i.e., sequence both strands of cDNA).

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the hybridization and washing stringencies necessary for accurate clone identification. The resulting autoradiograms are compared to duplicate plates of colonies or plaques; each exposed spot corresponds to a positive colony or plaque. The colonies or plaques are selected, expanded and the DNA is isolated from the colonies for further analysis and sequencing.

The ESTs can additionally be used to screen Northern blots of mRNA obtained from various tissues or cell cultures, including the tissue of origin of the EST clone. Northern analysis will most often produce one to several positive bands. The bands can be selected for further study based on the predicted size of the mRNA.

Positive cDNA clones in phage lambda are analyzed to determine the amount of additional sequence they contain using PCR with one primer from the EST and the other primer from the vector. Clones with a larger vector-insert PCR product than the original EST clone are analyzed by restriction digestion and DNA sequencing to determine whether they contain an insert of the same size or similar as the mRNA size on a Northern blot.

Once one or more overlapping cDNA clones are identified, the complete sequence of the clones can be determined. The preferred method is to use exonuclease III digestion (McCombie, W.R., Kirkness, E., Fleming, J.T., Kerlavage, A.R., Iovannisci, D.M., and Martin-Gallardo, R., *Methods*: 3: 33-40, 1991). A series of deletion clones is generated, each of which is sequenced. The resulting overlapping sequences are assembled into a single contiguous sequence of high redundancy (usually three to five overlapping sequences at each nucleotide position), resulting in a highly accurate final sequence.

A similar screening and clone selection approach can be applied to obtaining cosmid or lambda clones from a genomic DNA library that contains the complete gene from which the EST was derived (Kirkness, E.F., Kusiak, J.W., Menninger, J.,

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4. Identify colonies containing clones related to the probe cDNA and purify them by known purification methods.

5. Nucleotide sequence the ends of the newly purified clones to identify full length sequences.

5 6. Perform complete sequencing of full length clones by Exonuclease III digestion or primer walking. Northern blots of the mRNA from various tissues using at least part of the EST clone as a probe can optionally be performed to check the size of the mRNA against that of the purported full
10 length cDNA.

An EST is a specific tag for a messenger RNA molecule. The complete sequence of that messenger RNA, in the form of cDNA, can be determined using the EST as a probe to identify a cDNA clone corresponding to a full-length transcript,
15 followed by sequencing of that clone. The EST or the full-length cDNA clone can also be used as a probe to identify a genomic clone or clones that contain the complete gene including regulatory and promoter regions, exons, and introns.

20 ESTs are used as probes to identify the cDNA clones from which an EST was derived. ESTs, or portions thereof, can be nick-translated or end-labelled with P³² using polynucleotide kinase using labelling methods known to those with skill in the art. (**Basic Methods in Molecular Biology**, L.G. Davis, M.D. Dibner, and J.F. Battey, ed., Elsevier Press, NY, 1986). The
25 lambda library can be directly screened with the labelled ESTs of interest or the library can be converted en masse to pBluescript (Stratagene, La Jolla, California) to facilitate bacterial colony screening. Both methods are well known in the art. Briefly, filters with bacterial colonies containing
30 the library in pBluescript or bacterial lawns containing lambda plaques are denatured and the DNA is fixed to the filters. The filters are hybridized with the labelled probe using hybridization conditions described by Davis et al. The
35 ESTs, cloned into lambda or pBluescript, can be used as positive controls to assess background binding and to adjust

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of the EST sequence permits routine isolation and sequencing of the complete coding sequence of the corresponding gene. The complete coding sequence is present in a full-length cDNA clone as well as in the gene carried on genomic clones. Therefore, each EST "corresponds" to a cDNA (from which the EST was derived), a complete genomic gene sequence, a polypeptide coding region (which can be obtained either from the cDNA or genomic DNA), and a polypeptide or amino acid sequence encoded by that region.

The first step in determining where an EST is located in the cDNA is to analyze the EST for the presence of coding sequence, e.g., as described in Example 14. The CRM program predicts the extent and orientation of the coding region of a sequence. Based on this information, one can infer the presence of start or stop codons within a sequence and whether the sequence is completely coding or completely non-coding. If start or stop codons are present, then the EST can cover both part of the 5'-untranslated or 3'-untranslated part of the mRNA (respectively) as well as part of the coding sequence. If no coding sequence is present, it is likely that the EST is derived from the 3'-untranslated sequence due to its longer length and the fact that most cDNA library construction methods are biased toward the 3' end of the mRNA.

One general procedure for obtaining complete sequences from ESTs is as follows:

1. Purify selected human DNA from an EST clone (the cDNA clone that was sequenced to give the EST), e.g., by endonuclease digestion using ECOR1, gel electrophoresis, and isolation of the aforementioned clone by removal from low-melting agarose gel.

2. Radiolabel the isolated insert DNA, e.g., with ³²P labels, preferably by nick translation or random primer labeling.

3. Use the labeled EST insert as a probe to screen a lambda phage cDNA library or a plasmid cDNA library.

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sequences (see Examples that follow). Precisely because they do not contain coding regions and are therefore more unique in their sequence structures, those sequences which meet neither of the preceding criteria can be most useful and are generally preferred for mapping.

Consistent with the NIH mission and its responsibilities to disseminate knowledge and share the tangible fruits of its research, the present inventors have taken a number of steps to facilitate sequence data and clone availability. All EST sequences have been submitted to GenBank (representing an addition equivalent to 7% of the human nucleotides in Release 69 of GenBank, September 1991). The corresponding cDNA clones have been submitted to the American Type Culture Collection and information on clones and sequences has been submitted to the Genome Data Base (Pearson, P. Nucl. Acids Res. 19 (Suppl.): 2237-9 (1991)).

II. Complete Coding Sequences from ESTs

The ESTs of the present invention generally represent relatively small coding regions or untranslated regions of human genes. Although most of these sequences do not code for a complete gene product, the ESTs of the present invention are highly specific markers for the corresponding complete coding regions. The ESTs are of sufficient length that they will hybridize, under stringent conditions, only with DNA for that gene to which they correspond. Suitably stringent conditions comprise conditions, for example, where at least 95%, preferably at least 97% or 98% identity (base pairing), is required for hybridization. This property permits use of the EST to isolate the entire coding region and even the entire sequence. Therefore, only routine laboratory work is necessary to parlay the unique EST sequence into the corresponding unique complete gene sequence.

Thus, each of the ESTs of the present invention "corresponds" to a particular unique human gene. Knowledge

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desired tissue are preferably preprocessed by conventional techniques to reduce repeated sequencing of high and intermediate abundance clones and to maximize the chances of finding rare messages from specific cell populations. Preferably, preprocessing includes the use of defined composition prescreening probes, e.g., cDNA corresponding to mitochondria, abundant sequences, ribosomes, actins, myelin basic polypeptides, or any other known high abundance peptide; these prescreening probes used for preprocessing are generally derived from known ESTs. Other useful preprocessing techniques include subtraction, which preferentially reduces the population of certain sequences in the library (e.g., see A. Swaroop et al., Nucl. Acids R s. 19, 1954 (1991)), and normalization, which results in all sequences being represented in approximately equal proportions in the library (Patanjali et al, Proc. Natl. Acad. Sci. USA 88:1943 (1991)).

The cDNA libraries used in the present method will ideally use directional cloning methods so that either the 5' end of the cDNA (likely to contain coding sequence) or the 3' end (likely to be a non-coding sequence) can be selectively obtained."

Libraries of cDNA can also be generated from recombinant expression of genomic DNA. After they are amplified, ESTs can be obtained and sequenced, e.g., as illustrated in Example 11.

The sequences of the present invention include the specific sequences set forth in the Sequence Listing and designated SEQ ID NO: 1 - SEQ ID NO: 2412. In one aspect of this embodiment, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that comprise the cDNA coding sequences for polypeptides having less than 95% identity with known amino acid sequences (see Table 2) and more preferably less than 90% or 85% identity. In a second aspect, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that encode polypeptides having no similarity to known amino acid

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long enough to design PCR primers from each end of the sequence to amplify the complete EST. Sequences shorter than 150 bp are difficult to purify and use following PCR amplification. Furthermore, a 150 bp polynucleotide is likely to give a very strong signal with low background in a screen of a genomic library.

Finally, it is highly unlikely that a sequence of the same 150 bp exists in any genes in the genome besides the one tagged by the EST. Some closely related gene family members have very similar nucleotide sequences, but no examples of pairs of human genes with long segments of identical sequence have been reported to date. For instance, there are three known β -tubulin genes in humans. Several ESTs were found that matched one or another of these tubulin genes, but several new members of this gene family were also found and could be clearly distinguished from the three known members. ESTs that match perfectly to several different genes can be detected by hybridizing to chromosomes: if many chromosomal loci are observed, the sequence (or a close variant) is present in more than one gene. This problem can be circumvented by using the 3'-untranslated part of the cDNA alone as a probe for the chromosomal location or for the full-length cDNA or gene. The 3'-untranslated region is more likely to be unique within gene families, since there is no evolutionary pressure to conserve a coding function of this region of the mRNA.

As demonstrated in the Examples that follow, ESTs can be used to map the expressed sequence to a particular chromosome. In addition, ESTs can be expanded to provide the full coding regions, as detailed below. In this manner, previously unknown genes can be identified.

While a variety of cDNA libraries can be used to obtain ESTs, human brain cDNA libraries are exemplified and represent a preferred embodiment. Suitable cDNA libraries can be freshly prepared or obtained commercially, e.g., as shown in Examples 1, 2, and 11. The cDNA libraries from the

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the protein-coding exons of the human gene of interest. Exon trapping shows considerable promise as a general technique for identifying those genes in the human genome that cannot be found by cDNA cloning and EST sequencing. Exon amplification will also be useful for identifying the genes in regions of genomic DNA to which disease genes have been mapped. The exon amplification method can be used directly with the cosmid and YAC clones from human chromosomes that are being obtained by both NIH and DOE supported human genome centers. ESTs comprise DNA sequences corresponding to a portion of nuclear encoded messenger RNA. An EST is of sufficient length to permit: (1) amplification of the specific sequence from a cDNA library, e.g., by polymerase chain reaction (PCR); (2) use of a synthetic polynucleotide corresponding to a partial or complete sequence of the EST as a hybridization probe of a cDNA library, generally having 30 - 50 base pairs; or (3) unique designation of the pure cDNA clone from which the EST was derived (the EST clone) for use as a hybridization probe of a cDNA library. Preferably, EST-derived primer pairs and sequences amplify or detectably hybridize to a sequence from a genomic library.

It has been found that sufficient information is contained in the 150-400 base ESTs from one sequencing run to effect preliminary identification and exact chromosome mapping. Accordingly, the ESTs disclosed herein are generally at least 150 base pairs in length. The length of an EST is determined by the quality of sequencing data and the length of the cloned cDNA. Raw data from the automated sequencers is edited to remove low quality sequence at the end of the sequencing run. High quality sequences (usually a result of sequencing templates without excessive salt contamination) generally give about 400 bp of reliable sequence data; other sequences give fewer bases of reliable data. A 150 bp EST is long enough to be translated into a 50 amino acid peptide sequence. This length is sufficient to observe similarities when they exist in a database search. Furthermore, 150 bp is

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examples are provided to demonstrate and exemplify numerous aspects of the invention.

I. ESTs from cDNA Libraries

5 The sequences of the present invention were isolated from commercially available and custom made cDNA libraries using a rapid screening and sequencing technique. In general, the method comprises applying conventional automated DNA sequencing technology to screening clones, advantageously
10 randomly selected clones, from a cDNA library. Preferably, the library is initially "enriched" through removal of ribosomal sequences and other common sequences prior to clone selection. According to the present method, ESTs are generated from partial DNA sequencing of the selected clones.
15 The ESTs of the present invention were generated using low redundancy of sequencing, typically a single sequencing reaction. While single sequencing reactions may have an accuracy as low as 97%, this nevertheless provides sufficient fidelity for identification of the sequence and design of PCR
20 primers.

 Most human genes can be identified by EST sequencing from libraries of cDNA copies of messenger RNAs. However, some genes are expressed only at specific times during embryonic development, or only in small amounts in a few
25 specific cell types. Other genes have mRNAs that are degraded very quickly by the cell in which they are expressed. If any of these are the case, transcripts of the gene will not be represented in cDNA libraries so the gene will not be identifiable by EST sequencing. A new method
30 called "exon amplification", however, can be used to isolate and identify transcripts of such genes.

 Exon amplification works by artificially expressing part or all of a gene that is contained in a cloned fragment of genomic DNA such as a cosmid or yeast artificial chromosome
35 (YAC). The gene is cloned into a special vector, designed at MIT, that uses control elements from virus genes to express

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mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for preparation of antisense sequences, probes, and constructs is discussed in detail below. Unlike the random genomic DNA sequence tagged sites (STSs) (Olson et al., **Science** 245:1434 (1989)), ESTs point directly to expressed genes.

Various aspects of the present invention thus include the individual ESTs, corresponding partial and complete cDNA, genomic DNA, mRNA, antisense strands, triple helix probes, PCR primers, coding regions, and constructs. Also, where one skilled in the art is enabled by this specification to prepare expression vectors and polypeptide expression products, they are also within the scope of the present invention, along with antibodies, especially monoclonal antibodies, to such expression products.

BRIEF DESCRIPTION OF THE DRAWING

The single drawing Figure schematically illustrates the progression from chromosome to gene to mRNA to cDNA.

DETAILED DESCRIPTION OF THE INVENTION

The detailed description that follows provides not only the actual sequence of each new EST, but also explains how the ESTs were obtained, how to obtain the corresponding complete cDNA sequence and the corresponding genomic DNA sequence, how to make DNA constructs from the ESTs and corresponding sequences, how to use those sequences as reagents in molecular biology and other fields, how to produce gene products from the ESTs and corresponding sequences and antibodies to those gene products, and the functional categories of many ESTs and corresponding genes. Furthermore, numerous actual working examples and predictive

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regions and coding regions of chromosomes is of significant interest. There is a corresponding need for reagents for identifying and marking coding regions and transcribed regions of chromosomes. Furthermore, such human sequences are valuable for chromosome mapping, human identification, identification of tissue type and origin, forensic identification, and locating disease-associated genes (i.e., genes that are associated with an inherited human disease, whether through mutation, deletion, or faulty gene expression) on the chromosome.

SUMMARY OF THE INVENTION

Contrary to the expectations of the scientific community, cDNA screening and sequencing techniques have now been used to discover a large number of heretofore unknown human genes. Disclosed herein are over 2,400 new human polynucleotide sequences. These sequences could represent up to 5% of all human genes. The novelty of these sequences has been established through comparison to both nucleotide sequence databases and amino acid sequence databases. Surprisingly, over 80% of the sequences generated were unrelated to any sequences previously described in the literature.

The sequences of the present invention were ascertained using a fast approach to cDNA characterization. This approach could facilitate the tagging of most expressed human genes within a few years at a fraction of the cost of complete genomic sequencing, provide new genetic markers, provide new DNA-based therapeutics and diagnostics, and provide other valuable nucleotide reagents.

The sequences disclosed herein, styled Expressed Sequence Tags ("ESTs"), are markers for human genes actually transcribed *in vivo*. Techniques are disclosed for using these ESTs to obtain the full coding region of the corresponding gene. The use of ESTs, complete coding sequences, or fragments thereof for marking chromosomes, for

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corresponding to structural and regulatory polypeptides or peptides. See, for example, Putney, et al., *Nature* 302:718-721 (1983). Putney, et al. sequenced over 150 clones from a rabbit muscle cDNA library and identified clones for 13 of the 19 known muscle polypeptides, including one new isotype but no unknown coding sequences.

Another perceived drawback of cDNA sequencing was that some mRNAs are abundant, and some are rare. The cellular quantities of mRNA from various genes can vary by several orders of magnitude. This led critics to believe that most information obtained from cDNA sequencing would be repetitious and useless.

The present invention demonstrates that, despite such skepticism, cDNA sequencing now provides a rapid method for obtaining enormous amounts of valuable genetic information and DNA products of great utility for the biotechnology and pharmaceutical industries. Not only can many distinct cDNAs be isolated and sequenced, even partial cDNAs can be used, with conventional, well-understood methods, to isolate entire genes, and to determine the chromosomal locations and biological functions of these genes. As is demonstrated here, fragments of only a few hundred bases are sufficient, in many cases, to identify the probable function of a new human gene if it is similar in structure to a gene from another animal, or from plants or bacteria. Similarly, even fragments of untranslated regions of a cDNA can be used to: i) isolate the coding sequence of the cDNA; ii) isolate the complete gene; iii) determine the position of the gene on a human chromosome, and hence the potential of the gene to cause a human genetic disease; and iv) determine the function of the gene by means of experiments in which the function of the native gene is disrupted by the addition of a short DNA fragment to the cell, e.g., using triple helix or antisense probes.

Because coding regions comprise such a small portion of the human genome, identification and mapping of transcribed

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human genes would remain unknown for at least the next decade. The present invention can greatly accelerate the pace at which human genes can be identified and mapped. Most gene researchers, in conjunction with publication of their results in this field, submit sequence data to the GenBank database. Prior to the present invention, GenBank listed the sequences of only a few thousand human genes and less than two hundred human brain mRNAs (GenBank Release 66.0, December, 1990).

The role of sequencing complementary DNA (cDNA), reverse transcribed from mRNA, as a part of the human genome project has been vigorously debated since the idea of determining the complete nucleotide sequence of humans first surfaced. The coding sequence of all human genes represents most of the information content of the genome, but only 3-5% of the total DNA. In contrast, cDNA (which is only made from the transcription product of active genes) is one-half to three-fourths (the remainder being 5'- and 3'-untranslated sequence) meaningful genetic information. Thus, some have argued that cDNA sequencing should take precedence over genomic sequencing (Brenner, CIBA Found. Symp. 149:6 (1990)). However, until now, such arguments have not been heeded.

Genomic sequencing proponents have argued the difficulty of finding every mRNA expressed in all tissues, cell types, and developmental states, and that much valuable information from intronic and intergenic regions, including control and regulatory sequences, will be missed by cDNA sequencing. (Report of the Committee on Mapping and Sequencing the Human Genome, National Research Council (National Academy Press, Washington, D.C. 1988)). Further, sequencing of transcribed regions of the genome using cDNA libraries has heretofore been considered impractical or unsatisfactory. Libraries of cDNA were believed to be dominated by repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes comprising common or housekeeping sequences. It was believed that cDNA libraries would provide few sequences

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The ability of one strand of DNA to attach or hybridize to a complementary strand has already been exploited for several purposes. For example, small pieces of DNA (15 to 25 base pairs long) can be made which will hybridize to longer strands of DNA which have a complementary sequence. These short "primers" can be selected such that they hybridize to a specific, unique location on the longer strand. Once the primers have hybridized to their target on the DNA, the polymerase chain reaction (PCR) can be employed to generate millions of copies of (or amplify) the particular segment of DNA between the locations to which two primers are bound. Briefly, this technique allows amplification of a DNA region situated between two convergent primers, using oligonucleotide primers that hybridize to opposite strands. Primer extension proceeds inward across the region between the two primers, and the product of DNA synthesis of one primer serves as a template for the other primer. Repeated cycles of DNA denaturation, annealing of primers, and extension result in an exponential increase in the number of copies of the region bounded by the primers.

Similarly, a labeled segment of single-stranded DNA can be hybridized to a longer DNA sequence, such as a chromosome, to mark a specific location on the longer sequence. Segments of DNA 50 bases long or longer that hybridize to a unique DNA location in the human genome are extremely unlikely to hybridize elsewhere in the human genome.

The Human Genome Project is an effort to sequence all human DNA (the human genome). The human genome is estimated to comprise 50,000 - 100,000 genes, up to 30,000 of which might be expressed in the brain (Sutcliffe, *Ann. Rev. Neurosci.* 11:157 (1988)). Once dedicated human chromosome sequencing begins in three to five years, it was expected that 12-15 years will be required to complete the sequence of the genome (Report of the Ad Hoc Program Advisory Committee on Complex Genomes, Reston, Va., Feb. 1988, D. Baltimore Ed. (NIH, Bethesda, Md, 1988)). At that rate, the majority of

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respectively. This nomenclature reflects the orientation of the nucleotide constituents of the mRNA.

5 A cDNA is a DNA copy of a messenger RNA, which contains all of the exons of a gene. The cDNA can be thought of as having three parts: an untranslated 5' leader, an uninterrupted polypeptide-coding sequence, and a 3' untranslated region. The untranslated leader and trailing sequences are important for initiation of translation, mRNA stability, and other functions. The untranslated leader and trailing sequences are called 5'- and 3'-untranslated sequences, respectively. The 3' untranslated sequence is usually longer than the 5' untranslated leader, and can be longer than the polypeptide-coding sequence. The untranslated regions typically have many, randomly-distributed stop codons, and do not display the nonrandom base arrangements found in coding sequences. The 5'-untranslated sequence is relatively short, generally between 20 and 200 bases. The 3'-untranslated sequence is often many times longer, up to several thousand bases.

20 The translated or coding sequence begins with a translational start codon (AUG or GUG) and ends with a translational stop codon (UAA, UGA, or UAG). Generally, translation begins at the first "start" codon on the mRNA and proceeds to the first "stop" codon. Coding sequences can be distinguished by their nonrandom distribution of bases; numerous computer algorithms have been developed to distinguish coding from noncoding regions in this way.

30 Human DNA differs from person to person. No two persons (except perhaps identical twins) have identical DNA. While the differences, called allelic variations or polymorphisms, are slight on a molecular level, they account for most of the physical and other observable differences between individuals. It has been estimated that approximately 14 million sequence polymorphism differences exist between individuals.

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enzyme called reverse transcriptase. The resulting is called complementary DNA, or cDNA. This is schematically shown in the single Figure. When substantially all of the mRNA from one cell or tissue is converted to cDNA at once and cloned into multiple copies of a recombinant vector to allow replication and manipulation in the laboratory, the result is called a cDNA library.

The various types of genes include those which code for polypeptides, those which are transcribed into RNA but are not translated into polypeptides, and those whose functional significance does not demand that they be transcribed at all. Most genes are found on large molecules of DNA located in chromosomes. Double stranded cDNA carries all the information of a gene. Each base of the first strand is joined to a complementary base (hybridized) in the second strand. The linear DNA molecules in chromosomes have thousands of genes distributed along their length. Chromosomes include both coding regions (coding for polypeptides) and noncoding regions; the coding regions represent only about three percent of the total chromosome sequence.

An individual gene has regulatory regions that include a promoter which directs expression of the gene, a coding region which can code for a polypeptide, and a termination signal. The regulatory DNA sequence is usually a noncoding region that determines if, where, when, and at what level a particular gene is expressed.

The coding regions of many genes are discontinuous, with coding sequences (exons) alternating with noncoding regions (introns). The final mRNA copy of the gene does not include these introns (which can be much longer than the coding region itself), although it does contain certain untranslated regions that usually do not code for the polynucleotide gene product. Untranslated sequences at the beginning and end of the mRNA are known as 5'- and 3'-untranslated regions,

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in the literature. See, for example, "Glossary of Genetics, Classical and Molecular" by R. Rieger, A. Michaelis, and M.M. Green (Fifth Edition, Springer-Verlag, New York (1991)). The contents of this and other publications cited in the
5 specification are incorporated by reference herein.

At an initial level, the present invention is based on identification and characterization of gene segments. Genes are the basic units of inheritance. Each gene is a string of connected bases called nucleotides. Most genes are formed of
10 deoxyribonucleic acid, DNA. (Some viruses contain genes of ribonucleic acid, RNA.) The genetic information resides in the particular sequence in which the bases are arranged. A short sequence of nucleotides is often called a polynucleotide or an oligonucleotide.

Like genes, polypeptides are built from long strings of individual units. These units are amino acids. The nucleotide sequence of a gene tells the cell the sequence in which to arrange the amino acids to make the polypeptide encoded by that gene. In general, chains of up to about 200
20 amino acids are called polypeptides, while proteins are larger molecules made up of polypeptide subunits; both types of molecules are referred to generally herein as polypeptides. A triplet of nucleotides (codon) in DNA codes for each amino acid or signals the beginning or end of the message (anticodon). The term codon is also used for the
25 corresponding (and complementary) sequences of three nucleotides in the mRNA into which the original DNA sequence is transcribed.

Generally, enzymes in the cell transcribe the permanent
30 DNA of the gene into a temporary RNA copy, called messenger RNA or mRNA. The mRNA, in turn, can be translated into a polypeptide by the cell. This entire process is called gene expression, and the polypeptide is the gene product encoded by the gene.

35 Scientists have previously discovered how to reverse the transcription process and copy mRNA back into DNA using an

**SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION
PRODUCT**

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Technical Field

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The present invention relates to newly identified polynucleotide sequences corresponding to transcription products of human genes, and to complete gene sequences associated therewith.

Background

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This invention relates to human genes. Identification and sequencing of human genes is a major goal of modern scientific research. The sequence of human genes is more than just a scientific curiosity. For example, by identifying genes and determining their sequences, scientists have been able to make large quantities of valuable human "gene products." These include human insulin, interferon, Factor VIII, tumor necrosis factor, human growth hormone, tissue plasminogen activator, and numerous other compounds. Additionally, knowledge of gene sequences can provide the key to treatment or cure of genetic diseases (such as muscular dystrophy and cystic fibrosis). The present invention represents a quantum leap forward in mankind's knowledge of human gene sequences.

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There are several basic concepts of molecular biology which figure prominently in the invention. A brief explanation of those concepts follows. Additional background information and definitions for scientific terms can be found

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(71) Applicant: THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Washington, DC (US).			
(72) Inventors: VENTER, Craig, J. ; 1718 Nordic Hill Circle, Silver Spring, MD 20906 (US). ADAMS, Mark, D. ; 12812 Sage Terrace, Germantown, MD 20874 (US). MORENO, Ruben, F. ; 14415 Coral Gables Way, North Potomac, MD 20878 (US).			
		(74) Agents: ALTMAN, Daniel, E. et al.; Knobbe, Martens, Olson and Bear, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US).	
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(57) Abstract			
<p>Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.</p>			